

# PRIMARY TYPES OF MICROLEPIDOPTERA IN THE MUSEUM OF COMPARATIVE ZOOLOGY (WITH A DISCURSION ON V. T. CHAMBERS' WORK)

SCOTT E. MILLER<sup>1</sup> and RONALD W. HODGES<sup>2</sup>

**ABSTRACT:** Primary types (holotypes, lectotypes and syntypes) in the moth superfamilies Eriocranioidea, Hepialoidea, Nepticuloidea, Incurvarioidea, Tineoidea (except Gracillariidae), Gelechioidea (except Coleophoridae), Copromorphoidea, Yponomeutoidea, Sesioidea, Cossioidea, Tortricoidea, Zygaenoidea, Pyraloidea, and Pterophoroidea are listed. Most of the taxa are Nearctic, several Neotropical. Authors included are S. E. Cassino, V. T. Chambers, W. G. Dietz, H. Edwards, C. Fish, W. T. M. Forbes, H. Frey and J. Boll, A. R. Grote, T. W. Harris, G. D. Hulst, W. D. Kearfott, A. S. Packard, Lord Walsingham, and P. C. Zeller. Lectotypes are designated herein for *Anacampsis quadrimaculella* (Chambers) and *Isophriectis trimaculella* (Chambers) (both Gelechioidea).

## INTRODUCTION

Classification of several groups of North American microlepidoptera is made very difficult because most early workers on this fauna did not designate type specimens; their descriptions are inadequate to recognize the species; their "type" material was sent to more than one institution; and among them they described several hundred species. The Museum of Comparative Zoology (MCZ), Harvard University, has a significant number of types of these authors, particularly of V. T. Chambers. Chambers is notorious for his very brief and inadequate descriptions, the large

number of his often very short papers in scattered journals, the large number of species for which no type material exists, and for the fact that his types were dispersed among the MCZ and contemporary workers. Because we have studied Chambers' papers and believe we have uncovered nearly all remaining specimens that can be considered authentic, we have included a discussion of specimens in other collections (see Appendix) and Chambers' bibliography to apprise other workers of the facts they will need when selecting lectotypes or designating neotypes. Many species are represented by no extant type material or are not represented by specimens in the MCZ; their names do not appear in the catalog.

This catalog lists the primary types of 609 taxa of Microlepidoptera located in the MCZ. All holotypes, lectotypes, and syntypes in the families treated are listed along with some paralectotypes and "pseudotypes." All specimens (except obvious paratypes) with numbered red "M.C.Z. type" labels are included. These red numbered labels were placed on the specimens by Nathan Banks and subsequent curators and sometimes are not accurate as noted in this list. Some lectotypes have been designated by previous authors by inference of holotype (Article 74(b), International Code of Zoological Nomenclature, third edition, 1985). For example, a lectotype was designated for *Nepticula castaneae-foliella* Chambers by inference of holotype. We have not designated additional lectotypes here (except for two as part of

<sup>1</sup> Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts 02138. Present address: Bishop Museum, Box 19000-A, Honolulu, Hawaii 96817.

<sup>2</sup> Systematic Entomology Laboratory, Agricultural Research Service, USDA, % NHB 168, National Museum of Natural History, Washington, D.C. 20560.

Hodges' research) because this action should be left to specialists as part of the revision process. Each species-group entry has five potential topics: 1) Original combination, author, and date-page citation; 2) Category of type, sex of specimen(s), and MCZ type number; 3) Geographic distribution as indicated in the original description and/or labels accompanying the type specimens; 4) Current valid name (if different from original combination); and 5) Remarks.

Information presented in brackets [ ] represents additions to or corrections of the original description. The present valid name of each taxon listed, if it differs from the original combination, is also included (following Hodges, et al., 1983 and more recent literature). Sex is included only when it could be determined readily without damaging the specimen. The locations of some other syntypes are indicated if known, using the following abbreviations: AMNH = American Museum of Natural History, New York; ANSP = Academy of Natural Sciences, Philadelphia; BMNH = British Museum (Natural History), London; LACM = Natural History Museum of Los Angeles County, Los Angeles; and USNM = National Museum of Natural History, Smithsonian Institution, Washington.

The following superfamilies (following Hodges, et al., 1983) are included in the list: Eriocranioidea, Hepialoidea, Neptuloidea, Incurvarioidea, Tineoidea (except Gracillariidae), Gelechioidea (except Coleophoridae), Copromorphoidea, Yponomeutoidea, Sesioidea, Cossioidea, Tortricoidea, Zygaenoidea, Pyraloidea, and Pterophoroidea. Data for Tineidae and Blastobasidae were provided by D. R. Davis and D. Adamski, respectively. Gracillariidae are under study by D. R. Davis (USNM). Coleophoridae are under study by B. Wright (Nova Scotia Museum) and were discussed by McDunnough (1944).

All the types listed here are in the main MCZ collection, except those in the Harris collection, which is maintained separately from the general collection. The MCZ col-

lection includes the Peabody Academy collection (the Peabody Academy still exists in Salem, Massachusetts, but no longer maintains entomological collections) and the types from the now defunct Boston Society of Natural History. Details on the major type collections discussed here follow:

*Vactor T. Chambers:* Most of the remains of the Chambers collection are at the MCZ, with another significant part at the USNM. See appendix for discussion of possible Chambers types at the BMNH. Chambers deposited types at the MCZ between 1876 and 1883 (Hagen, 1884); many of them are in very poor condition, and many probably are not true types but specimens substituted by Chambers for lost or damaged types.

Walsingham (1889: 24) wrote, "Chambers, in distributing specimens to his various correspondents, frequently appears to have attached a wrong name to them. This he admits in more than one instance in his writings. The utmost caution is required before accepting a specimen in any collection as a co-type of any one of his species."

Chambers (1877c: 39) wrote: "... But a few years ago I began to make a collection to be preserved as types of all my species. These were all pinned and spread. Unfortunately, during my absence in Colorado, the greater part of this collection was destroyed. One or more specimens of the greater number of species were fortunately preserved, and most other species can be supplied. This collection is now in the Cambridge Museum [MCZ]. It contains types — pinned and spread — of something over 200 species." (See also Braun, 1963: 2; Hagen, 1884; Sattler, 1962.)

Most Chambers specimens bear only the data "Kentucky./Chambers." (machine printed) along with a handwritten determination label, and frequently a large handwritten number (between 12 and 164) on a separate label (the meaning of which remains unknown). Most of these were presumably collected around his home in

Covington, Kentucky (Chambers, 1875b: 234). Chambers wrote (1872: 433), "Out of at least one hundred and fifty species of *Tineina* which I have found here, fully three-fourths have been taken resting upon the leeward side of a board fence not two hundred yards long, at Linden Grove Cemetery at this place [Covington, Kentucky]."

Other major lots of material include those collected by Chambers (and others) in Colorado in 1875 (and other years) and Texas specimens purchased by Chambers from Gustaf W. Belfrage. Belfrage lived near Norse, Bosque County (some 60 km northwest of Waco), Texas, from 1868 to 1882 (Geiser, 1948). Most, but not all, of Belfrage's moth material was probably collected there.

The USNM has many Chambers types, obtained primarily through acquiring the collections of C. H. Fernald (which included part of the M. Murtfeldt collection), F. H. Belanger (via Laval University, Quebec), and W. Saunders (Busck, 1903: 768).

Type localities for many of Chambers' species are not obvious from the original descriptions. We have followed the label data on the types, unless contradicted by other evidence.

Because of the scattered nature of Chambers' publications, we have included all of them on Lepidoptera in our literature section, whether mentioned here or not.

*William G. Dietz*: His types of Blastobasidae and Gracillariidae are in the MCZ.

*Heinrich Frey and Jacob Boll*: Several types of species described by Frey and Boll (1873) previously assumed to be at the BMNH (e.g., Braun, 1972: 56) are present. These were evidently collected by Boll around Cambridge, Massachusetts, in autumn 1871 (Geiser, 1948: 22–23).

*Thaddeus W. Harris*: Probably the oldest extant collection of North American insects, most specimens are still in good condition. It is held as a separate unit at the MCZ because the labels are cryptic

(Johnson, 1925). Most specimens bear Harris numbers, the catalog of which is in the MCZ Archives. Specimens for which further data are not given probably came from Massachusetts.

*George D. Hulst*: As discussed by Rindge (1955), the main Hulst collection is at AMNH, but the MCZ has syntypes of some Hulst taxa.

*William D. Kearfott*: The MCZ has a number of Kearfott syntypes (labeled "cotype"), some of which have now become paralectotypes. As discussed by Klots (1942: 392–393), much of Kearfott's collection is in AMNH, but parts are in USNM (via the Barnes collection), and elsewhere (including MCZ). The best candidates for lectotype designation for Kearfott taxa will generally be found at AMNH or USNM, not at MCZ. Authorship of lectotype designations in some Kearfott Tortricidae remains problematic; Klots (1942) credited many lectotype designations to Heinrich (1923, 1926). However, Heinrich did not publish which specimen he considered the type if there was more than one syntype in AMNH. Klots usually did designate individual specimens, and should be considered the designator of most of the lectotypes in question.

*Alpheus S. Packard, Jr.*: Included here are California specimens collected by Henry Edwards. Some of these Edwards specimens bear Edwards' catalog numbers; data from Edwards' catalog (now in AMNH) are included here.

*Lord Walsingham [Thomas de Grey]*: The MCZ has one Walsingham holotype (Eriocraniidae) and many syntypes (Oecophoridae and Plutellidae). The syntypes are duplicates of species described by Walsingham (1881) from material he collected in California and Oregon in 1871–72 (see Essig, 1941), which were sent to Chambers by Walsingham. Lectotypes for these taxa should be designated from syntypes in the Walsingham collection at the BMNH.

*Philipp C. Zeller*: The MCZ has most of the specimens collected by Jacob Boll around Dallas, Texas in late 1869 and 1870

(Geiser, 1929, 1948) and described by Zeller in three papers on North American Microlepidoptera (1872, 1873, 1875). The Boll specimens were purchased by Louis Agassiz for the MCZ and sent to Zeller for study. They all bear characteristic labels: machine printed "Dallas/Tex. Boll" and handwritten Zeller determination labels on green paper.

The following corrections and additions to recent literature are noted in the list: Several types not located by Wilkinson and coauthors are included (Nepticulidae). The syntypes of 11 Harris species reported lost by Duckworth and Eichlin (1978) are included (Sesiidae). The following were accidentally omitted from Hodges, et al. (1983): "*Elachista texanella* Chambers (Scythrididae), *Paralipsa fulminalis* (Zeller) (Pyr-alidae) and *Marasmarcha pumilio* (Zeller) (Pterophoridae). Problems are noted in previous lectotype selections for *Pyrausta unifascialis* (Packard) (Pyr-alidae) and *Oidaematophorus grandis* (Fish) (Pterophoridae). LECTOTYPES are here designated for *Anacamptis quadrimaculella* (Chambers) and *Isophrictis trimaculella* (Chambers) (both Gelechiidae). "*Scythris albapenella* (Chambers) is here transferred from Scythrididae to Blastobasidae on advice of J. F. Landry and D. Adamski; Adamski will deal with its generic placement in a subsequent publication.

#### ACKNOWLEDGMENTS

We thank V. O. Becker, R. L. Brown, C. V. Covell, D. R. Davis, J. B. Heppner, W. E. Miller, E. G. Munroe, R. W. Poole, J. A. Powell, G. Robinson, K. Sattler, M. Shaffer, F. C. Thompson, K. Tuck, A. Watson, and P. Whalley for reviewing the manuscript; F. H. Rindge (AMNH) and J. P. Donahue (LACM) for information on types in other collections; and M. D. Bowers, A. F. Newton, and D. F. Schweitzer for support at MCZ. Development of this list was partially supported by National Science Foundation facilities grant BSR-82 03845 to P. O. Wilson and M. D. Bowers of the

MCZ. A. G. Wine and T. M. Kuklenski prepared the final manuscript. Publication costs of this study were covered in part by a grant from the Wetmore Colles Fund.

#### SUPERFAMILY ERIOCRANIOIDEA

##### Family Eriocraniidae

**auricyanea** Walsingham, 1882: 204, **Micropteryx** [sic]; HOLOTYPE male, MCZ 1622; [United States: probably California (see Davis, 1978)]; *Dyseriocrania auricyanea* (Walsingham).

#### SUPERFAMILY HEPIALOIDEA

##### Family Hepialidae

**argenteomaculatus** Harris, 1841: 295, **Hepiolus** [sic]; SYNTYPE, MCZ 26378; United States: [Massachusetts, Cambridge, Harris no. 257]; *Sthenopsis argenteomaculatus* (Harris); Often cited as 1842, the description was originally published in 1841, and reprinted in 1842 (page 295 of both works).

**labradoriensis** Packard, 1864c: 394, **Hepialus**; HOLOTYPE [?] male, MCZ 160; Canada: Labrador, Straits of Belle Isle, Caribou Island, Salmon Bay, 3 August 1860, A. S. Packard, Jr.; *Korscheltellus gracilis* (Grote) (see Wagner, 1988); Abdomen and wings glued in place.

#### SUPERFAMILY NEPTICULOIDEA

##### Family Nepticulidae

**apicalbella** Chambers, 1873: 127, **Nepticula**; PARALLECTOTYPES (5), MCZ 1496; United States: Kentucky, June, Chambers; *Stigmella apicalbella* (Chambers); Lectotype (USNM type 523) and 3 paralectotypes in USNM designated by Newton and Wilkinson (1982: 367).

**bosquella** Chambers, 1878c: 106, **Nepticula**; SYNTYPES (2 males), MCZ 14958; United States: Texas, Bosque County; *Ectoedemia obrutella* (Zeller); A male syntype in USNM (type 524).

**castanaefoliella** Chambers, 1875a: 117, **Nepticula**; LECTOTYPE female, MCZ 14956; United States: Kentucky, Chambers; *Stigmella castanaefoliella* (Chambers); Wilkinson and Scoble (1979: 46), designated the lectotype (Code, Art. 74(b)).

**ciliaefuscella** Chambers, 1873: 128, **Nepticula**; SYNTYPE, MCZ 1301; United States: Kentucky, "at lamp," 23 August [year not stated]; Chambers; *Stigmella fuscotiella* (Clemens).

**clemensella** Chambers, 1873: 125, **Nepticula**; LEC-

TOTYPE female, MCZ 14955; United States: Kentucky, Chambers; *Ectoedemia clemensella* (Chambers); Lectotype and paralectotype in MCZ by Wilkinson and Scoble (1979: 86).

**grandisella** Chambers, 1880b: 193, **Nepticula**; HOLOTYPE male, MCZ 1302; United States: Texas; *Ectoedemia grandisella* (Chambers).

**juglandifoliella** Chambers, 1878c: 105, **Nepticula**; SYNTYPE, MCZ 1495; United States: Kentucky, Chambers; *Stigmella juglandifoliella* (Clemens); Chambers (1878c) used Clemens' (1861) name for "mine and adult," the mine of which was described by Clemens. Despite acknowledgement of Clemens' previous use, Chambers called his name a new species.

**latifasciella** Chambers, 1878c: 106, **Nepticula**; HOLOTYPE female, MCZ 1497; United States: Kentucky, "on . . . chestnut-trees," August, Chambers; *Stigmella latifasciella* (Chambers).

**maculosella** Chambers, 1880b: 193, **Nepticula**; HOLOTYPE female, MCZ 1303; United States: Texas; *Stigmella nigricorticella* (Chambers); Newton and Wilkinson (1982: 425) commented on status of this name.

**maximella** Chambers, 1873: 126, **Nepticula**; SYNTYPES (2), MCZ 14951; United States: Kentucky, Chambers; *Ectoedemia platanella* (Clemens); Not mentioned by Wilkinson and Scoble (1979) or Wilkinson and Newton (1981).

**pomivorella** Packard, 1870: 237, **Micropteryx**; SYNTYPE, MCZ 1499; United States: Massachusetts, Salem, A. S. Packard, Jr; *Stigmella pomivorella* (Packard); There are two specimens, an adult ("Imm. 12.[1871]") and a cocoon ("Apple June 19"), probably from the same individual as stated by Busck (1901: 52).

**quericastanella** Chambers, 1873: 127, **Nepticula**; SYNTYPES (3), MCZ 1304; United States: Kentucky, Chambers; *Stigmella saginella* (Clemens).

**quericipulchella** Chambers, 1878c: 105, **Nepticula**; HOLOTYPE male, MCZ 14957; United States: Kentucky, Chambers; *Stigmella quericipulchella* (Chambers).

**resplendensella** Chambers, 1875a: 118, **Nepticula**; LECTOTYPE, MCZ 14954; United States: Kentucky, 23 May [year not stated], Chambers; *Stigmella resplendensella* (Chambers); Lectotype designated by Newton and Wilkinson (1982: 456) who incorrectly stated it was in ANSP.

**serotinaeella** Chambers, 1873: 126, **Nepticula**; SYNTYPE, MCZ 1498; United States: Kentucky, Chambers; *Stigmella prunifoliella* (Clemens); Head and forewings only.

**thoracalbella** Chambers, 1873: 127, **Nepticula**; LECTOTYPE male, MCZ 14952; United States:

Kentucky, June, Chambers; *Microcalyptis thoracalbella* (Chambers); Wilkinson (1979: 70) designated the lectotype (Code, Art. 74(b)).

**unifasciella** Chambers, 1875a: 119, **Nepticula**; LECTOTYPE female, MCZ 1305; United States: Kentucky, Chambers; *Stigmella unifasciella* (Chambers); Lectotype and paralectotype also in MCZ designated by Newton and Wilkinson (1982: 440).

## Family Tischeriidae

**aenea** Frey and Boll, 1873: 222, **Tischeria**; SYNTYPES (5), MCZ 1349; United States: Massachusetts, "Cambr.B." [=Cambridge, Boll or Cambridge, Boston]; Braun (1972: 56) stated "Type, Texas (probably Dallas)[BM]," but type locality is not specified in original description, and introduction to the paper indicates most of the species were reared by Boll at Cambridge.

**badjiella** Chambers, 1875a: 109, **Tischeria**; SYNTYPES (8), MCZ 14941; United States: Kentucky, Chambers; Braun (1972: 21) stated "Type? Kentucky (MCZ?); Type [female] Kentucky(?), genitalia slide 9707 J.F.G.C. (USNM)." USNM specimen is type 516.

**clemensella** Chambers, 1878c: 99, **Tischeria**; SYNTYPE, MCZ 14940; United States: Texas; Braun (1972: 34-35) stated type locality is Kentucky as implied by Chambers (1875a: 110, 1878c: 99), but specimen is labelled "Tex."

**concolor** Zeller, 1875: 352, **Tischeria**; HOLOTYPE female, MCZ 1348; United States: Texas, Dallas, Boll; Braun (1972: 27) stated "Type [female], Texas (MCZ)."

**fuscomarginella** Chambers, 1875a: 110, **Tischeria**; LECTOTYPE male, MCZ 14938; United States: Kentucky, Chambers; Braun (1972: 35) designated the lectotype (Code, Art. 74(b)).

**heliopsisella** Chambers, 1875a: 113, **Tischeria**; SYNTYPES (2), MCZ 1503; United States: Kentucky, Chambers.

**latipenella** Chambers, 1878c: 97, **Tischeria**; HOLOTYPE male, MCZ 14942; United States: Texas; *Tischeria zelleriella* Clemens.

**pulvella** Chambers, 1878c: 99, **Tischeria**; LECTOTYPE, MCZ 1505; United States: Texas; Braun (1972: 97) designated the lectotype (Code, Art. 74(b)).

**purinosella** Chambers, 1875a: 110, **Tischeria**; LECTOTYPE, MCZ 14939; United States: Kentucky, Chambers; Braun (1972: 29) designated the lectotype (Code, Art. 74(b)).

**quercivorella** Chambers, 1875a: 109, **Tischeria**; SYNTYPES (5), MCZ 1506; United States: Kentucky, Chambers; *Tischeria citrinipennella* Cle-

mens; Braun (1972: 15) stated "Type [male], Kentucky (MCZ)," but no specimen was labelled lectotype.

**roseticola** Frey and Boll, 1873: 223, **Tischeria**; SYNTYPES (2), MCZ 1350; United States: Massachusetts, "Cambr.B."; See comments under *Tischeria acnea* regarding type locality.

**tinctoriella** Chambers, 1875a: 108, **Tischeria**; SYNTYPE, MCZ 150; United States: Kentucky, Chambers; *Tischeria quercitella* Clemens; Two additional specimens, labelled only "Kentucky./Chambers." may be syntypes also.

## SUPERFAMILY INCURVARIOIDEA

### Family Incurvariidae

**alba** Zeller, 1873: 232, **Tegeticula**; LECTOTYPE male, MCZ 2922; United States: Texas, Dallas, Boll; *Tegeticula yuccasella* (Riley); Lectotype designated by Davis (1967: 51).

**aureovireus** Dietz, 1905: 39, **Incurvaria**; HOLOTYPE, MCZ 2574; United States: Pennsylvania, Hazleton, [23] June 1899, Dietz; *Phylloporia bis-trigella* (Haworth).

**bella** Chambers, 1873: 73, **Adela**; SYNTYPE female, MCZ 1402; United States: Kentucky, May, Chambers; *Adela caeruleella* Walker.

**ehalybeis** Zeller, 1873: 226, **Adela**; HOLOTYPE male, MCZ 32960; United States: Texas, Dallas, Boll; *Adela caeruleella* Walker.

**dietziella** Kearfott, 1905: 187, fig. 6, **Incurvaria?**; SYNTYPES (4), MCZ 14236; United States: New Jersey, Essex County, 30 May 1907, W. D. Kearfott; *Chalceopla dietziella* (Kearfott).

**paradoxa** Chambers, 1878e: 149, **Hyponomeuta** [sic]; LECTOTYPE male, MCZ 32959; United States: Colorado, "nine miles north of Colorado Springs and thence 5 miles east of the mountains"; *Prodoxus quinquepunctellus* (Chambers); Lectotype and four paralectotypes also in MCZ designated by Davis (1967: 76).

**5-punctella** Chambers, 1875d: 7, **Hyponomeuta** [sic]; LECTOTYPE female, MCZ 1413; United States: Texas, Bosque County; *Prodoxus quinquepunctellus* (Chambers); Lectotype designated by Davis (1967: 75).

**rheumapterella** Dietz, 1905: 37, pl. I: fig. 4, **Incurvaria**; LECTOTYPE female, MCZ 2873; United States: Colorado, Durango; *Prodoxus coloradensis* Riley; Lectotype and paralectotype also in MCZ designated by Davis (1967: 83).

### Family Heliozelidae

**aesella** Chambers, 1877a: 105, **Heliozela**; HOLOTYPE, MCZ 1512; United States: Kentucky, near

Covington, 24 April, Chambers; Head and right front wing only.

**ampelopsifoliella** Chambers, 1874a: 168, **Antispila**; PSEUDOTYPES (3), MCZ 1367; United States: Kentucky, Chambers; Chambers (1874: 168) states "known only in the larval state," so these cannot be types. One of the three specimens is missing from its minuten.

**gracilis** Zeller, 1873: 314, **Heliozela**; HOLOTYPE male, MCZ 1351; United States: Texas, Dallas, Boll.

**viticordifoliella** Chambers, 1874a: 168, **Antispila**; SYNTYPES (2), MCZ 1368; United States: Kentucky, Chambers.

## SUPERFAMILY TINEOIDEA

### Family Tineidae Donald R. Davis

**apachella** Dietz, 1905: 7, **Amydria**; SYNTYPE female, MCZ 2904; United States: Arizona, Catal[ina] Springs; The type series of apachella is mixed. This specimen (MCZ 2904) is *curvistrigella* Dietz. One female syntype (Williams, Arizona) of *apachella* is in USNM.

**apicisignatella** Dietz, 1905: 65, **Tinea**; SYNTYPES (2 of 3), MCZ 2862; United States: New Hampshire, Hampton and Pennsylvania, Hazleton; *Nemopogon variatella* (Clemens); Both MCZ syntypes lack abdomens and one lacks a forewing. An additional female syntype is in USNM.

**approximatella** Dietz, 1905: 27, **Scardia**; PARALECTOTYPES (8), MCZ 2889 and 1 PSEUDOTYPE, MCZ 2889; United States: New Jersey, Essex County (Kearfott); and Pennsylvania, Hazleton, and Mauch Chunk; *Scardiella approximata* (Dietz); One Hazleton, Pennsylvania, "syntype" bears a label date of "6/28 06" and therefore may not be a true type. Lectotype male and paralectotype female in USNM, designated by Robinson (1986: 109).

**argentinetella** Chambers, 1876b: 104, **Semele**; SYNTYPE female, MCZ 1400; United States: Kentucky, June, Chambers; *Homosetia argentinotella* (Chambers); No other syntypes are known.

**arizonella** Dietz, 1905: 6, **Amydria**; SYNTYPE male, MCZ 2903; United States: Arizona, Huachuca; Abdomen missing. Another male syntype (Phoenix, Arizona) in USNM.

**auricristatella** Chambers, 1873a: 110, **Pitys**; SYNTYPE female, MCZ 1397; United States: Kentucky, Chambers; *Homosetia auricristatella* (Chambers); No other syntypes are known.

**auristrigella** Chambers, 1873a: 86, **Tinea**; SYNTYPE male, MCZ 14943; United States: Kentucky, July, Chambers; *Isocorypha mediotriatella* Clemens; In

- poor condition and glued to a paper point. No other syntypes are known.
- auropulvella** Chambers, 1873a: 90, *Tinea*; SYNTYPES (1 male, 2 females), MCZ 1391; United States: Kentucky, July; *Nemapogon auropulvella* (Chambers); Two additional male syntypes in USNM.
- ausoruffusella** Chambers, 1873a: 87, *Tinea*; SYNTYPE female, MCZ 1394; United States: Kentucky, Chambers; *Hybroma servulella* Clemens; No other syntypes are known.
- behrensella** Chambers, 1875b: 249, *Tinea*; HOLOTYPE, presumed lost; United States: California, San Francisco, J. Behrens.
- bimaculella** Chambers, 1873a: 87, *Tinea*; SYNTYPES (3 males), MCZ 1358; United States: Kentucky, Chambers; *Tinea mandarinella* Dietz; Chambers' name is preoccupied by Thunberg, 1794.
- bipunctella** Dietz, 1905: 77, *Progona*; HOLOTYPE female, [no MCZ number]; United States: Florida, Hastings; *Mea bipunctella* (Dietz); Specimen mostly destroyed, only fragments of mesothorax adhering to pin.
- brevipennella** Dietz, 1905: 5, *Amydria*; SYNTYPES (3 males), MCZ 2901; United States: District of Columbia, Washington, A. Busck; Maryland, Plummer's [sic] Island, A. Busck; Additional syntypes in USNM (13) and BMNH (3).
- busckiella** Dietz, 1905: 12, *Paraplesia*; PSEUDOTYPE female, MCZ 2892; United States: Arizona, Catal[ina] Springs, [E. A. Schwarz]; *Hypoplesia busckiella* (Dietz); Dietz (1905) states that the only material examined by him was a single male (therefore the holotype) in the USNM. Consequently the MCZ "cotype" and a male "cotype" in LACM are not true types.
- carbonella** Dietz, 1905: 30, *Abacobia*; SYNTYPES (1 male, 4 females), MCZ 2871; United States: Pennsylvania, Hazeleton, W. G. Dietz; *Elatobia carbonella* (Dietz); Two additional syntypes (male and female) in USNM.
- cariosella** Dietz, 1905: 17, *Epilegis*; SYNTYPE male, MCZ 2898; United States: California, Kaweah; *Setomorpha rutella* Zeller; Dietz described this species from two males from Kaweah, California. A female "cotype" in MCZ and another female "cotype" in LACM, both of which bear no locality labels, are not types.
- chrysocomella** Dietz, 1905: 43, *Isocorypha*; HOLOTYPE, MCZ 2883; United States: Kansas, Onaga, [H. Kahl].
- clemensella** Chambers, 1873a: 174, *Xylesthia*; SYNTYPES (3 males, 3 females, 2 unknown), MCZ 1384; United States: Kentucky, [Chambers]; *Xylesthia pruniramiella* Clemens; Four MCZ syntypes are badly damaged with abdomens missing from three. Three additional male syntypes in USNM.
- coloradella** Dietz, 1905: 6, *Amydria*; SYNTYPES (1 male, 3 females), MCZ 2902; United States: Arizona, Santa Rita Mountains; California, Kaweah; and Colorado, Durango; *Amydria effrentella* Clemens; Two additional (male, female) syntypes in USNM.
- confusella** Dietz, 1905: 8, *Amydria*; SYNTYPES (6 females), MCZ 2906; United States: California, Pasadena; Two additional female syntypes in USNM.
- costotristigella** Chambers, 1873a: 87, *Tinea*; SYNTYPE male, MCZ 14947; United States: Kentucky, August and September, Chambers; *Nemapogon granella* (Linnaeus); Specimen in poor condition; right forewing and abdomen missing. No other syntypes are known.
- crecentella** Kearfott, 1907b: 9, *Amydria*; SYNTYPE male, MCZ 14235; United States: Arizona, Pima County, Baboquivari Mountains; *Acrolophus crecentella* (Kearfott); Three additional male syntypes in USNM. Presumably the fifth remaining syntype is in University of Kansas collection, Lawrence, Kansas.
- crystalata** Chambers, 1875b: 243, *Semele*; SYNTYPE male, MCZ 1401; United States: Kentucky, June, Chambers; *Homosetia crystalata* (Chambers); No other syntypes known.
- croceoverticella** Chambers, 1876b: 106, *Tinea*; SYNTYPE male, MCZ 1393; United States: Kentucky, Chambers; No other syntypes known.
- cruciferella** Dietz, 1905: 14, *Paraneura*; SYNTYPES (2 males), MCZ 2895; United States: California, Mountain View; *Lindera tessellatella* (Blanchard); One male "cotype" each in LACM and USNM are pseudotypes.
- curviliemiella** Dietz, 1905: 71, *Homostinea*; SYNTYPES (3 males), MCZ 2866; United States: District of Columbia, [Washington, A. Busck]; Kansas, Onaga; Louisiana, Vowells Mill; and, Missouri, St. Louis; Louisiana syntype is lost (only pin and labels remaining in MCZ). One male syntype (Washington, D.C.) is also present in LACM, but a second female "cotype" from Kentucky is a pseudotype.
- curvistrigella** Deitz, 1905: 8, *Amydria*; SYNTYPE female, MCZ 2905; United States: Arizona, Phoenix; Additional male syntype in USNM.
- dyarella** Dietz, 1905: 11, *Amydria*; HOLOTYPE female, MCZ 14234; United States: Pennsylvania, Hazleton; Two female paratypes also exist, one in MCZ and one in USNM.
- ehrbornella** Dietz, 1905: 13, *Paraneura*; SYNTYPES (2 males), MCZ 2894; United States: California, Mountain View; *Lindera tessellatella* (Blanchard).

- eunitariacella** Chambers, 1873a: 85, **Tinea**; SYNTYPES (2 males, 2 females), MCZ 1398; United States: Kentucky, Chambers; *Eudarcia eunitariacella* (Chambers).
- fasciella** Chambers, 1873a: 111, **Pityis**; SYNTYPE female, MCZ 1347; United States: Kentucky, Chambers; *Homosetia fasciella* (Chambers); No other syntypes are known. Another female in extremely worn condition bearing Chambers' Kentucky label exists in MCZ, but it shows no other indications of being a syntype.
- floridella** Dietz, 1905: 77, **Progona**; HOLOTYPE female, MCZ 2869; United States: Florida, Hastings; *Mea skimmerella* (Dietz); Holotype erroneously stated to be a male by Dietz.
- fractiliniella** Dietz, 1905: 17, **Apotomia**; SYNTYPE male, MCZ 2899; United States: California, Pasadena; *Setomorpha rutella* Zeller; Additional female syntype in USNM.
- frigidella** Packard, 1867: 62, **Oecophora**; SYNTYPES (2 females), MCZ 1549; Canada: Labrador, Caribou Island, Square Island; *Niditinea fuscella* (Linnaeus); Both syntypes in very poor condition with the abdomen missing from one.
- fulvisuffusella** Dietz, 1905: 68, **Tinea**; HOLOTYPE male, MCZ 2864; United States: New Hampshire, Hampton; *Nemapogon variatella* (Clemens); A male pseudotype from the same locality in USNM.
- fuscoeristatella** Chambers, 1873a: 111, **Pityis**; SYNTYPE(S), presumed lost; United States: Kentucky; *Homosetia fuscoeristatella* (Chambers); Dietz (1905) examined the "type" of this species in the MCZ and considered it a synonym of *Homosetia miscecristatella* Chambers.
- fuscofasciella** Chambers, 1875b: 257, **Euplocamus** (?); LECTOTYPE female, MCZ 1385; United States: Kentucky, Chambers; *Montescardia fuscofasciella* (Chambers); Lectotype designated by Robinson (1986: 76).
- fuscomaculella** Chambers, 1873a: 88, **Tinea**; SYNTYPE male, MCZ 14946; United States: Kentucky, Chambers; *Nemapogon granella* (Linnaeus); No other syntypes known.
- geniculatella** Dietz, 1905: 62, **Tinea**; SYNTYPES (2 females), MCZ 2861; United States: California, Occidental and Pasadena; *Nemapogon geniculatella* (Dietz); Deposition of an additional syntype from Kaweah, California, is unknown.
- griscella** Chambers, 1873a: 88, **Tinea**; SYNTYPES (2 males), MCZ 1389; United States: Kentucky, Chambers; *Niditinea fuscella* (Linnaeus); One syntype in very poor condition with head, abdomen, and left forewing missing.
- hybromella** Chambers, 1874a: 51, **Oenoc**; SYNTYPE male, MCZ 1399; United States: Kentucky, Chambers; No other syntypes known.
- inamoenella** Zeller, 1873: 224, **Setomorpha**; HOLOTYPE male, MCZ 2882; United States: Texas, Dallas, Boll; *Setomorpha rutella* Zeller.
- interstitiella** Dietz, 1905: 68, **Tinea**; HOLOTYPE male, MCZ 2865; United States: Georgia, Forsyth; *Nemapogon interstitiella* (Dietz).
- irrorella** Dietz, 1905: 34, **Monopis**; SYNTYPES (4 males, 3 females), MCZ 2872; United States: Pennsylvania, Hazleton and Mauch Chunk; *Monopis marginistrigella* (Chambers); Additional syntypes in LACM (1 male, 1 female) and USNM (2 males). Deposition of syntype(s) from New York unknown.
- maculatella** Dietz, 1905: 84, **Homosetia**; SYNTYPES (2 males), MCZ 2851; United States: California, Placer County; Pennsylvania, Hazleton; *Homosetia marginimaculella* (Chambers); Syntype from Placer County, California, missing abdomen.
- majorella** Dietz, 1905: 15, **Setomorpha**; SYNTYPES (2 females), MCZ 2896; United States: California, Pasadena; *Setomorpha rutella* Zeller.
- marginistrigella** Chambers, 1873a: 88, **Tinea**; SYNTYPE, MCZ 14950; United States: Kentucky, Chambers; *Monopis marginistrigella* (Chambers); Specimen in very poor condition, glued to a point with only the head, prothorax, and right forewing. No other syntypes known.
- margoriella** Dietz, 1905: 11, **Amydria**; SYNTYPES (4 males), MCZ 2891; United States: Florida; Kansas, Lawrence; Texas, San Antonio; The type series appears to be mixed, with the eastern records most likely representing *Amydria dyarella* Dietz. Dietz (1905) mentions syntypic material in USNM, but none has been found.
- minutipulvella** Chambers, 1875e: 212, **Tinea**; SYNTYPE female, MCZ 1390; Canada; *Nemapogon acapnopenella* (Clemens); Another female syntype in USNM.
- miriamella** Dietz, 1905: 90, **Leucomela**; SYNTYPES (4 males, 2 females), MCZ 2854; United States: Maryland, Plummer's [sic] Island; Pennsylvania, Hazleton and Mauch Chunk; Two additional male syntypes in USNM and one male syntype in BMNH.
- miscecristatella** Chambers, 1873a: 111, **Pityis**; SYNTYPE female, MCZ 1395; United States: Kentucky, Chambers; *Homosetia miscecristatella* (Chambers); No other syntypes known.
- miscella** Chambers, 1873a: 86, **Tinea**; SYNTYPE(S), presumed lost; United States: Kentucky; Dietz (1905) reported the poorly preserved "type" in MCZ.
- molybdanella** Dietz, 1905: 61, **Tinea**; SYNTYPES (2 females), MCZ 2880; United States: California, Pasadena; *Nemapogon molybdanella* (Dietz).
- multimaculella** Chambers, 1878c: 89, **Gelechia**?; SYNTYPES (2 males), MCZ 1451; United States: Texas; *Setomorpha rutella* Zeller.



- multistriatella** Dietz, 1905: 59, **Tinea**; SYNTYPES (2 females), MCZ 2878; [Canada: Toronto]; *Nemapogon multistriatella* (Dietz); A female syntype is also present in the LACM (Plummers Island, Maryland). The MCZ syntypes lack locality labels.
- nepotella** Dietz, 1905: 21, **Epichaeta**; SYNTYPES (2 females), MCZ 2887; United States: California, Pasadena; *Aprata paradoxella* Dietz.
- nigroatomella** Dietz, 1905: 70, **Tinea**; HOLOTYPE, MCZ 2865; United States: New Jersey, Montclair, W. D. Kearfott; *Nemapogon granella* (Linnaeus).
- obliquella** Dietz, 1905: 10, **Amydria**; SYNTYPES (2 females), MCZ 2909; United States: California, Los Angeles County, Pasadena; Additional male syntype (Los Angeles County) in USNM.
- obscurella** Dietz, 1905: 82, **Homosetia**; HOLOTYPE male, MCZ 14945; United States: Kansas, Onaga; *Homosetia bifasciella* (Chambers).
- occidentella** Dietz, 1905: 9, **Amydria onagella**; SYNTYPES, presumed lost; United States: California, Mountain View and Pasadena.
- occidentella** Chambers, 1880b: 193, **Tinea tapetzella**; SYNTYPES (1 male, 1 female?), MCZ 1392; United States: California, San Francisco; *Tinea occidentella* Chambers; According to Chambers, the type series consisted of three specimens. The location of the third syntype is unknown.
- onagella** Dietz, 1905: 9, **Amydria**; SYNTYPES (2 males), MCZ 2908; United States: Kansas, Onaga; One syntype missing right wings.
- operosella** Zeller, 1873: 223, **Setomorpha**; HOLOTYPE male, MCZ 2881; United States: Texas, Dallas, Boll; *Setomorpha rutella* Zeller; Abdomen and left wings missing.
- ophrionella** Dietz, 1905: 56, **Tinea**; HOLOTYPE male, MCZ 2875; United States: New York, Ithaca; *Nemapogon ophrionella* (Dietz); Left wings missing.
- orleansella** Chambers, 1873a: 85, **Tinea**; SYNTYPE male, MCZ 14949; United States: Louisiana, New Orleans; *Niditinea orleansella* (Chambers); Syntype in poor condition, unspread, and glued to a point. No other syntypes known.
- pandurella** Dietz, 1905: 8, **Amydria**; SYNTYPES (2 males), MCZ 2907; United States: Arizona, Phoenix; California, Pasadena; *Amydria curvistrigella* Dietz; Dietz stated that the type series consisted of "two specimens, [male] and [female], in my collection." A second specimen in MCZ is hereby considered a syntype even though it is also a male (i.e., sex mis-determined by Dietz) and bears no type labels. Two "cotypes" in USNM must thereby be regarded as pseudotypes. One of these (from Pasadena) is a female, but it was misidentified and is *A. confusella* Dietz.
- paradoxella** Dietz, 1905: 21, **Aprata**; HOLOTYPE female, MCZ 2186; United States: California, Pasadena; Dietz (1905) misdetermined the holotype as a male.
- rileyi** Dietz, 1905: 59, **Tinea**; SYNTYPES (3 females), MCZ 2879; United States: Pennsylvania, Hazleton; District of Columbia; Florida Hastings; *Nemapogon rileyi* (Dietz); One female syntype collected by Busck in Washington, D.C., and loaned to Dietz has been returned to USNM. The 25 specimens from Hastings, Florida (reared by Riley) were referred to by Dietz in the original description.
- roburella** Dietz, 1905: 58, **Tinea**; HOLOTYPE male, MCZ 2877; United States: New Jersey, Essex County [Park], W. D. Kearfott; *Nemapogon roburella* (Dietz).
- ruderella** Zeller, 1873: 225, **Setomorpha**; HOLOTYPE male, MCZ 14233; United States: Texas, Dallas, Boll; *Setomorpha rutella* Zeller.
- seardina** Zeller, 1873: 215, **Anaphora**; SYNTYPES (2 males), MCZ 33318; United States: Texas, Dallas, Boll; *Acrolophus popeanella* (Clemens); Two additional male syntypes in BMNH ("Carolina" and Texas).
- septemstrigella** Chambers, 1878c: 79, **Tinea**; HOLOTYPE male, MCZ 1386; United States: Texas; *Augolychna septemstrigella* (Chambers).
- sepulchrella** Dietz, 1905: 74, **Tryptodema**; SYNTYPE male, MCZ 2867; United States: Maryland, Plummer's [sic] Island, A. Busck; Three additional syntypes (2 males, 1 female) in USNM.
- sigmoidella** Dietz, 1905: 16, **Setomorpha**; SYNTYPES (2 males), MCZ 2897; United States: Colorado, Glenwood Springs, Pueblo; *Setomorpha rutella* Zeller; One additional male syntype each in USNM and LACM.
- simulella** Dietz, 1905: 13, **Paraneura**; SYNTYPE female, MCZ 2893; United States: California, Folsom and Los Angeles; *Lindera tessellatella* Blanchard; A second syntype (Los Angeles) in LACM.
- skinnerella** Dietz, 1905: 76, **Progona**; HOLOTYPE male, MCZ 2868; United States: New Jersey, Caldwell; *Mea skinnerella* (Dietz).
- straminiella** Chambers, 1873a: 86, **Tinea**; SYNTYPE(S), presumed lost; United States: Kentucky, June.
- texanella** Chambers, 1878c: 79, **Anaphora**; SYNTYPE male, MCZ 1383; United States: Texas; *Acrolophus texanella* (Chambers); No other syntypes known.
- thoracestrigella** Chambers, 1876b: 106, **Tinea**; SYNTYPE(S), presumed lost; United States: [type locality not stated].
- transversestrigella** Dietz, 1905: 20, **Semiota**; SYNTYPES (8 males), MCZ 2900; United States: Cali-

- ifornia, Pasadena; *Setomorpha rutella* Zeller; Four additional male syntypes in USNM.
- tuscanellella** Dietz, 1905: 53, **Tinea**; SYNTYPE female, MCZ 2854; United States: Arizona, Tucson [Tucson]; *Tinea occidentella* Chambers; No other syntypes known.
- unomaculella** Chambers, 1875b: 258, **Tinea**; SYNTYPE female, MCZ 1387; United States: Texas; No other syntypes known.
- vicinella** Dietz, 1905: 55, **Tinea**; HOLOTYPE female, MCZ 2855; United States: Florida, Gotha; *Ceratophaga vicinella* (Dietz); Sex given as male in original description.
- visaliella** Chambers, 1873a: 113, **Cyane**; SYNTYPE male, MCZ 14974; United States: Kentucky, Visalia, Chambers; *Choropleca visaliella* (Chambers); The single known syntype is badly broken with the remaining parts glued to a point.
- xanthostictella** Dietz, 1905: 56, **Tinea**; HOLOTYPE male, MCZ 2876; United States: Georgia, Forsyth.
- yumaella** Kearfott, 1907b: 6, **Plutella**; SYNTYPE male (1 of 16), MCZ 11858; United States: Arizona, Yuma County, Desert; *Dyotopasta yumaella* (Kearfott); Nine Yuma County syntypes in USNM, some of the remaining syntypes (other localities) at University of Kansas.
- ### Family Lyonetiidae
- albella** Chambers, 1871a: 23, **Cemiostoma**; SYNTYPES (2 of 4), MCZ 1306; United States: Kentucky, Chambers; *Paraleucoptera albella* (Chambers); One possible syntype in USNM (type 518).
- albella** Chambers, 1877d: 140, **Eurynome**; SYNTYPES (2), MCZ 1312; United States: Colorado, near Edgerton, elevation about 6,500 feet; *Philonome albella* (Chambers); Two possible syntypes in LACM.
- albicapitella** Chambers, 1875e: 125, **Bucculatrix**; SYNTYPE (?), MCZ 14962; Canada; *Bucculatrix agnella* Chambers; Missing hind wings and abdomen. Braun (1963: 79) considered this name "an apparent transposition of syllables" of *capitealbella* Chambers. One possible syntype in USNM (type 5776).
- alniella** Chambers, 1875c: 303, **Lyonetia**; SYNTYPES (9), MCZ 1313; United States: Colorado, "along Grand River, Clear Creek, Fall River and Fontain-qui-Bouille, in all its stages, up to 9,000 feet altitude". Another syntype in LACM.
- ambrosiaefoliella** Chambers, 1875a: 119, **Bucculatrix**; SYNTYPES (2), MCZ 1308; United States: Kentucky, bred from leaves of *Ambrosia trifida* Linnaeus, Chambers.
- apicistrigella** Chambers, 1875a: 105, **Lyonetia**; SYNTYPE, MCZ 1314; United States: Kentucky, August, Chambers; *Lyonetia speculella* Clemens; Missing abdomen.
- canadensisella** Chambers, 1875e: 146, **Bucculatrix**; SYNTYPE, MCZ 1307; Canada; Missing abdomen. According to Braun (1963: 147) there is a female type in USNM (type 5775), but we could not locate it.
- capitealbella** Chambers, 1873a: 150, **Bucculatrix**; HOLOTYPE, MCZ 14961; United States: Kentucky, Chambers; *Bucculatrix agnella* Clemens; One "syntype" in USNM (type 519).
- clemensella** Chambers, 1874a: 97, **Philonome**; SYNTYPES 7 (2 missing from pins), MCZ 1311; United States: Kentucky, Chambers; One possible syntype in USNM (type 522).
- curvilineatella** Packard, 1869: 354, pl. 8, fig. 16, **Lithocolletis**; SYNTYPE, MCZ 1347; [United States]; *Bucculatrix pomifoliella* Clemens; Broken and missing head.
- fuscocapulella** Chambers, 1878c: 104, **Acanthoconemes**; SYNTYPE, MCZ 1530; United States: Texas, Bosque County; Missing head and forewings.
- inornatella** Chambers, 1880b: 188, **Eulyonetia**; SYNTYPE, MCZ 1353; United States: Texas, Belfrage; Missing left wings and abdomen.
- litigiosella** Zeller, 1875: 354, **Bucculatrix**; SYNTYPE (1 of 2) female (not male as stated by Zeller), MCZ 14959; United States: Texas, Dallas, Boll.
- luteella** Chambers, 1873a: 151, **Bucculatrix**; SYNTYPES (7), MCZ 1501; United States: Kentucky, March, Chambers; Braun (1963: 153) stated that some of these syntypes are *Bucculatrix packardella*, and that there is a female syntype at USNM (type 520) and male syntype at ANSP.
- luteella** Chambers, 1875e: 304, **Eurynome**; HOLOTYPE, MCZ 14964; United States: Colorado, Spanish Bar, 4 July; *Philonome luteella* (Chambers).
- magnella** Chambers, 1875d: 54, **Bucculatrix**; SYNTYPES (6), MCZ 1309; United States: Kentucky, Chambers; Braun (1963: 42-43) listed only one female "type" in MCZ, and two "paratypes" in USNM.
- obscurofasciella** Chambers, 1873a: 150, **Bucculatrix**; SYNTYPE female, MCZ 1500; United States: Kentucky, 23 May, Chambers; *Bucculatrix trifasciella* Clemens; Braun (1963: 136-137) noted a female syntype in USNM (type 521).
- packardella** Chambers, 1873a: 151, **Bucculatrix**; "SYNTYPES" (2), MCZ 14960; United States: Kentucky, Chambers; Two specimens glued to the same point, labelled only "Kentucky, Chambers." and

"Type/14960." Braun (1963: 129) stated "Two specimens thus named, presumably by Chambers, in the Museum of Comparative Zoology, but not labeled types, do not represent this species."

**staintonella** Chambers, 1878d: 133, **Bucculatrix**; LECTOTYPE male, MCZ 1310; United States: Colorado, Edgerton, elevation 6,000 feet; Originally described by Chambers (1877d: 141) as *B. albella*, a name preoccupied by Stainton. Lectotype designated by Braun (1963: 74).

## SUPERFAMILY GELECHIOIDEA

### Family Oecophoridae

[Note: The Walsingham syntypes listed below were received by Chambers from Walsingham. Lectotypes should be designated from BMNH specimens.]

**albaciaella** Chambers, 1878b: 77, **Strobisia**; HOLOTYPE, MCZ 1548; United States: Ohio, Cincinnati; *Menesta tortriciformella* Clemens; Head and thorax only.

**albella** Chambers, 1874b: 235, **Harpalyce**; SYNTYPES (5), MCZ 1417; United States: Texas, Clifton, Belfrage; *Durrantia piperatella* (Zeller).

**apicipunctella** Chambers, 1875d: 8, **Hyponomeuta**; LECTOTYPE male, MCZ 1404; United States: Texas, Basque [sic] County, Belfrage; *Ethmia apicipunctella* (Chambers); Lectotype designated by Powell (1973: 88), also paralectotype in MCZ.

**argillacea** Walsingham, 1881: 313, pl. XXXVI, fig. 2, **Depressaria**; SYNTYPE, MCZ 14975; United States: California, Tehama County, Newville; *Agonopterix argillacea* (Walsingham).

**arnicella** Walsingham, 1881: 314, pl. XXXVI, fig. 3, **Depressaria**; SYNTYPE, MCZ 14976; United States: California, Mount Shasta; *Agonopterix arnicella* (Walsingham).

**bicostomaculella** Chambers, 1877a: 127, **Gelechia**; SYNTYPE male, MCZ 1461; United States: Colorado, Edgerton, July; *Taygete decemmaculella* (Chambers); Hodges (1986: 6) transferred *decemmaculella* to Oecophoridae.

**boreasella** Chambers, 1873a: 189, **Oecophora**; LECTOTYPE male, MCZ 1553; United States: Kentucky; *Decantha boreasella* (Chambers); Lectotype designated by Hodges (1974: 104).

**canusella** Chambers, 1874b: 235, **Harpalyce**; SYNTYPE, MCZ 1415; United States: Texas, [13/8]; *Antaeotricha humilis* (Zeller).

**chrysurella** Dietz, 1905: 42, **Breckenridgia** [sic]; HOLOTYPE male, MCZ 33274; United States: [Southwest] Colorado, ["6-28-89"]; *Ethmia albistrigella* (Walsingham).

**clemensella** Chambers, 1876b: 173, **Gelechia**; SYNTYPES (5), MCZ 1488; United States: Pennsylvania, Easton; *Agonopterix clemensella* (Chambers).

**coryliella** Chambers, 1875b: 242, **Hyale**; SYNTYPE, MCZ 14974; United States: Kentucky, Covington, Chambers; *Menesta tortriciformella* Clemens.

**eressonella** Chambers, 1878e: 86, **Cryptolechia**; LECTOTYPE male, MCZ 1420; United States: Texas; *Psilocorsis cryptolechiella* (Chambers); Lectotype designated by Hodges (1974: 92), also 2 paralectotypes in MCZ.

**difficilisella** Chambers, 1872a: 66, **Evagora**; SYNTYPE male, MCZ 1528; United States: Kentucky, Chambers; *Taygete attributella* (Walker); Hodges (1986: 6) transferred *attributella* to Oecophoridae.

**discostrigella** Chambers, 1877d: 122, **Anesychia**; LECTOTYPE male, MCZ 1421; United States: Colorado, Edgerton, 6,500 feet; *Ethmia discostrigella* (Chambers); Lectotype designated by Powell (1973: 93), also 4 paralectotypes in MCZ.

**eupatoriella** Chambers, 1878e: 82, **Depressaria**; SYNTYPE, MCZ 1432; United States: Kentucky, Chambers; *Agonopterix eupatoriella* (Chambers).

**faginella** Chambers, 1872a: 131, **Hagno**; LECTOTYPE male, MCZ 1419; United States: Kentucky, Chambers; *Psilocorsis cryptolechiella* (Chambers); Lectotype designated by Hodges (1974: 92), also 4 paralectotypes in MCZ.

**fernaldella** Chambers, 1878c: 82, **Depressaria**; POSSIBLE SYNTYPES (2); United States: Maine; *Machimia tentoriferella* Clemens; Two specimens with no type labels may be types: one is labelled "Me"; "47" [pencil]; "fernaldella/Chb" [Chambers' pen]; "Machimia/(tentoriferella?)/AB May 1900"; the other "L.I." [?, pencil, illegible]; "Kentucky.[crossed out]/Chambers."; "22" [Chambers' hand].

**fernaldella** Riley, 1889: 155, **Setiostoma**; SYNTYPES (2 of 12), MCZ 11907; United States: California, Los Angeles County; Other syntypes in USNM; Lectotype should be designated from USNM specimen.

**hagenella** Chambers, 1878c: 80, **Anesychia**; LECTOTYPE male, MCZ 1422; United States: Texas, Bosque County; *Ethmia hagenella* (Chambers); Lectotype designated by Powell (1973: 110), also paralectotype in MCZ.

**lithosina** Zeller, 1873: 244, **Cryptolechia**; HOLOTYPE male, MCZ 1717; United States: Texas, Dallas, Boll; *Antaeotricha unipunctella* (Clemens).

**longimaculella** Chambers, 1872a: 43, **Hyponomeuta**; LECTOTYPE male, MCZ 1403; United States: Kentucky, Chambers; *Ethmia longimaculella* (Chambers); Lectotype designated by Powell (1973: 178), also 4 paralectotypes in MCZ.

*mirusella* Chambers, 1874b: 233, **Anesychia**; LECTOTYPE male, MCZ 1423; United States: Texas, Belfrage; *Ethmia mirusella* (Chambers); Lectotype designated by Powell (1973: 193), also 4 paralectotypes in MCZ.

*multipunctella* Chambers, 1874b: 233, **Anesychia**; LECTOTYPE male, MCZ 1425; United States: Texas, Waco, Belfrage; *Ethmia semilugens* (Zeller); Lectotype designated by Powell (1973: 86), also 13 paralectotypes in MCZ.

*nebeculosa* Zeller, 1873: 245, fig. 12, **Cryptolechia**; SYNTYPES (4), MCZ 1720; United States: Texas, Dallas, Boll; *Antaeotricha humilis* (Zeller).

*novi-mundi* Walsingham, 1881: 318, **Depressaria**; SYNTYPE, MCZ 14971; United States: California and Oregon; *Exaeretia thoracenigracella* (Chambers).

*nubiferella* Walsingham, 1881: 316, pl. XXXVI, fig. 6, **Depressaria**; SYNTYPE, MCZ 14977; United States: Oregon, Rogue River; *Agonopterix nubiferella* (Walsingham).

*obscuromaculella* Chambers, 1878c: 86, **Cryptolechia?**; SYNTYPE, MCZ 1418; United States: Texas, Bosque County, [11/8.]; *Inga obscuro-maculella* (Chambers); Another syntype in USNM (Hodges, 1974: 102).

*piperatella* Zeller, 1873: 239, **Cryptolechia**; HOLOTYPE male, MCZ 1719; United States: Texas, Dallas, Boll; *Durrantia piperatella* (Zeller).

*posticella* Walsingham, 1881: 315, pl. XXXVI, fig. 5, **Depressaria**; SYNTYPE, MCZ 14972; United States: California and Oregon; *Agonopterix posticella* (Walsingham).

*quinqueferella* Walsingham, 1881: 322, **Glyphipteryx** [sic]; PARALECTOTYPE (?), MCZ [no number]; United States: [California]; *Fabiola quinqueferella* (Walsingham); Designated a paralectotype by Heppner (1978: 49), but, as noted by Heppner (1984: 335), it might not be one of the original syntypes.

*shaleriella* Chambers, 1875a: 114, **Oecophora**; SYNTYPE, MCZ 1552; United States: Kentucky, Chambers; *Fabiola shaleriella* (Chambers); Head and thorax only.

*texanella* Chambers, 1880b: 180, **Hyponomeuta**; LECTOTYPE, MCZ 1406; United States: Texas; *Ethmia zelleriella* (Chambers); Lectotype designated by Powell (1973: 113).

*thoracefasciella* Chambers, 1875b: 246, **Gelechia**; SYNTYPE, MCZ 1465; United States: California; *Exaeretia thoracefasciella* (Chambers).

*thoracenigracella* Chambers, 1875b: 246, **Gelechia**; SYNTYPE, MCZ 1466; United States: California; *Exaeretia thoracenigracella* (Chambers); Fragments in capsule

*tortricella* Chambers, 1874b: 235, **Harpalyce**; SYNTYPES (3), MCZ 1416; United States: Texas; *Antaeotricha unipunctella* (Clemens).

*trifurcella* Chambers, 1873: 12, **Anesychia**; LECTOTYPE female, MCZ 1426; United States: Kentucky, Chambers; *Ethmia trifurcella* (Chambers); Lectotype designated by Powell (1973: 194).

*umbraticostella* Walsingham, 1881: 318, pl. XXXVI, fig. 8, **Depressaria**; SYNTYPE, MCZ 14973; United States: California and Oregon; *Exaeretia umbraticostella* (Walsingham).

*vestalis* Zeller, 1873: 247, **Cryptolechia**; HOLOTYPE female, MCZ 1718; United States: Texas, Dallas, Boll; *Antaeotricha vestalis* (Zeller).

*xanthobasis* Zeller, 1875: 324, **Setiostoma**; HOLOTYPE male, MCZ 33256; United States: Texas, Dallas, Boll; *Rectiostoma xanthobasis* (Zeller).

*zelleriella* Chambers, 1878c: 80, **Hyponomeuta**; LECTOTYPE female, MCZ 1405; United States: Texas, Bosque County; *Ethmia zelleriella* (Chambers); Lectotype designated by Powell (1973: 113).

## Family Elachistidae

*parvipulvella* Chambers, 1875d: 56, **Elachista**; PSEUDOTYPES (4), MCZ 1513; United States: Texas, Braun (1948: 51) stated that none of the 4 MCZ specimens is an *Elachista* and that the real type is in USNM.

*staintonella* Chambers, 1878c: 96, **Elachista**; SYNTYPE male, MCZ 1514; United States: Texas.

## Family Blastobasidae

### David Adamski

*ampla* Dietz, 1900a: 103, pl. VI, fig. 1, **Ploiophora**; SYNTYPES (4 males), MCZ 2923; Adamski gen. slide nos. 2159, 2160, 2161; United States: Pennsylvania, Hazleton; 1 syntype missing abdomen; 1 male erroneously labeled as "type" (no. 6135) in USNM (Adamski gen. slide no. 2471).

*angustipennella* Dietz, 1900a: 108, **Pigritia**; SYNTYPES (5), MCZ 2930; Adamski gen. slide nos. 2166 (male), 2167; (male), 2168 (female); 1 syntype missing abdomen; 1 syntype not dissected; United States: Pennsylvania, Hazleton; 1 male erroneously labeled as "type" (no. 6157) in USNM (Adamski gen. slide no. 2473).

*annectella* Dietz, 1910: 63, pl. IV, fig. 34a, **Holocera zelleriella** var.; SYNTYPES (2 females of 3), MCZ 2932; Adamski gen. slide nos. 2150, 2151; United States: Iowa, Iowa City; Louisiana, Vowell's Mill; 1 syntype lost.

*annulipes* Dietz, 1910: 58, **Holocera crescentella** var.; HOLOTYPE female, MCZ 2950; United States:

- Arizona, Bahoyquivaria [sic] Mountains; Abdomen missing.
- argyreella** Dietz, 1900a: 113, **Pseudopigritia**; HOLOTYPE male, MCZ 2920; Adamski gen. slide no. 2201; United States: Pennsylvania, Hazleton.
- argyrosplendella** Dietz, 1910: 22, pl. II, figs. 13, 13a, 13b, **Calosima**; SYNTYPES (3 of 3), MCZ 2968, 1 male, 1 female; Adamski gen. slide nos. 2059, 2060; United States: Pennsylvania, Hazleton; Florida, Hastings; Louisiana, Vowells Mill; Syntype from Louisiana missing abdomen.
- arizonella** Dietz, 1900a: 109, **Pigritia**; SYNTYPES (2 of 2 males), MCZ 2912; Adamski gen. slide nos. 2169, 2170; United States: Arizona, Huachuca, and Nochales [sic].
- aufugella** Zeller, 1873: 301, **Blastobasis**; HOLOTYPE, MCZ 14978; United States: Texas, [Dallas], Boll; *Pigritia laticapitella* Clemens; Abdomen missing.
- basilarella** Dietz, 1900a: 105, pl. VI, fig. 6, **Pigritia**; SYNTYPES (3 of 3), MCZ 2928; Adamski gen. slide no. 2171 (female); United States: Pennsylvania, Hazleton; Kansas, Lawrence; Iowa; 2 syntypes missing abdomens.
- basipallidella** Dietz, 1910: 26, **Holococera dives** var.; SYNTYPES (2 of 3), MCZ 2951, 1 male and 1 female; Adamski gen. slide nos. 2082, 2085; United States: Pennsylvania, Hazleton; New Hampshire, Hampton; 1 syntype from Cohasset, Massachusetts in USNM (Adamski gen. slide no. 2434 — male).
- boreasella** Dietz, 1910: 47, pl. III, fig. 22, **Holococera**; SYNTYPES (4 of 5), MCZ 2960, females; Adamski gen. slide nos. 2064, 2065, 2066; R. B. Selander gen. slide no. 701; United States: New Hampshire, Webster; Canada: Montreal; 1 syntype lost.
- busckiella** Dietz, 1910: 36, pl. II, fig. 19, **Holococera**; SYNTYPES (2 males of 7), MCZ 2956; Adamski gen. slide nos. 2067, 2068; United States: Maryland, Plummer's [sic] Island, July and August 1903, A. Busck; 5 syntypes in USNM; 1 male dissected (Adamski gen. slide no. 2424), 4 without abdomens.
- canariella** Dietz, 1900a: 118, pl. VII, fig. 17, **Dryope**; HOLOTYPE, male, MCZ 14226; Adamski gen. slide no. 2212; United States: California, Sonoma County; *Dryoperia canariella* (Dietz).
- confectella** Zeller, 1873: 303, **Hypatima**; HOLOTYPE female, MCZ 2083; United States: Texas, [Dallas], Boll; *Valentinia confectella* (Zeller); Abdomen missing.
- confluentella** Dietz, 1910: 36, pl. II, fig. 18, **Holococera**; SYNTYPES (2 of 4), MCZ 2955, female; Adamski gen. slide no. 2156; 1 syntype missing abdomen; United States: Pennsylvania, Hazleton; Central New York; *Holococerina confluentella* (Dietz); 1 syntype from Cobasset, Massachusetts, in USNM (Adamski gen. slide no. 2429 — female). 1 syntype lost.
- confusella** Dietz, 1900a: 104, pl. VI, fig. 4, **Pigritia**; SYNTYPES (4), MCZ 2925; Adamski gen. slide nos. 2172 (female), 2173 (male), 2174 (female); 1 syntype not dissected; United States: Pennsylvania, [Hazleton]; 1 syntype from [Montclair], New Jersey, in USNM (type no. 6131) (Adamski gen. slide no. 2476 — female).
- crecentella** Dietz, 1910: 57, pl. IV, fig. 31, **Holococera**; HOLOTYPE female, MCZ 2949; Adamski gen. slide no. 2081; United States: Utah, Stockton, T. Spalding.
- dianella** Dietz, 1910: 22, **Calosima**; HOLOTYPE male, MCZ 2969; Adamski gen. slide no. 2061; United States: Georgia, Forsyth, 1895.
- discopunctella** Dietz, 1900a: 118, pl. VII, fig. 16, **Dryope**; HOLOTYPE female, MCZ 14223; Adamski gen. slide no. 2213; United States: Pennsylvania, Hazleton; *Dryoperia discopunctella* (Dietz).
- dives** Dietz, 1910: 26, pl. II, fig. 14 (male), **Holococera**; SYNTYPES (2 of 7), MCZ 2951, females; Adamski gen. slide nos. 2083, 2084; United States: Pennsylvania, Hazleton; Maryland, Plummer's [sic] Island; Canada: Toronto; 3 syntypes from Charleroi, Pennsylvania in USNM (Adamski gen. slide nos. 2431, 2433 (females) and 2432 (male)). 1 syntype lost.
- dorsomaculella** Dietz, 1900a: 112, pl. VII, fig. 10, **Pseudopigritia**; SYNTYPES (2 of 2), MCZ 2917, male and female, both specimens missing abdomens; United States: Pennsylvania, Hazleton.
- elyella** Dietz, 1910: 49, pl. III, fig. 25, **Holococera**; SYNTYPES (7 of 17), MCZ 2941; Adamski gen. slide nos. 2086 (female), 2087 (male), 2088 (male), 2089 (female); United States: Connecticut, East River, C. R. Ely; Maryland, Plummer's [sic] Island, A. Busck, and Frederick; New Jersey, Essex County, W. D. Kearfott; Specimens comprising remainder of original syntype series cannot be determined.
- equitella** Dietz, 1900a: 112, **Pseudopigritia**; SYNTYPES (3 females), MCZ 2918; Adamski gen. slide nos. 2204, 2205; 1 syntype missing abdomen; United States: Pennsylvania, Hazleton.
- estriatella** Dietz, 1910: 28, pl. II, fig. 15, **Holococera**; HOLOTYPE male, MCZ 2970; Adamski gen. slide no. 2090; United States: Massachusetts, [Cohasset].
- fenyesella** Dietz, 1900a: 119, **Dryope**; HOLOTYPE male, MCZ 14224; Adamski gen. slide no. 2214; United States: California, Pomona, A. Fenyes; *Dryoperia fenyesella* (Dietz).
- fidella** Dietz, 1900a: 103, pl. VI, figs. 2, 2a (male), 2b (female), 2c (male), **Ploioophora**; SYNTYPES (5), MCZ 2924; Adamski gen. slide nos. 2162 (male),

- 2163 (female), 2164 (female); two syntypes not dissected; United States: Pennsylvania, Hazleton; 1 syntype and 1 specimen erroneously labeled as "type" (type no. 6126) in USNM (Adamski gen. slide nos. 2472, 2473 — males).
- floridella** Dietz, 1910: 17, pl. I, fig. 10, **Valentinia**; SYNTYPES (1 of 4), MCZ 2966, female (no abdomen); United States: Florida, Crescent City, [male] cone of *Zamia integrifolia*; 3 syntypes (male and 2 females) in USNM; 1 dissected (Adamski gen. slide no. 2415 — male); 1 male erroneously labeled as "cotype," MCZ 2966, from Florida, G. D. Hulst Collection.
- fluxella** Zeller, 1873: 301, **Blastobasis**; HOLOTYPE male, MCZ 1711; Adamski gen. slide no. 2091; United States: Texas, [Dallas], Boll; *Holcocera fluxella* (Zeller).
- fraternella** Dietz, 1900a: 113, pl. VII, fig. 11, **Pseudopigritia**; HOLOTYPE male, MCZ 2919; Adamski gen. slide no. 2207; United States: Pennsylvania, Hazleton.
- fumerella** Dietz, 1910: 35, **Holcocera chalcifrontella** var.; SYNTYPES (6), MCZ 2954, females; Adamski gen. slide nos. 2074, 2075, 2076; 3 specimens not dissected; United States: [Pennsylvania, Hazleton], bred from fruit racemes of sumach.
- funebra** Dietz, 1910: 44, **Holcocera**; SYNTYPES (2 of 5), MCZ 2092, Adamski gen. slide no. 2092 (male); United States: Maryland, Plummer's [sic] Island, 1903, A. Busck; Pennsylvania, Hazleton; 3 syntypes from Plummer's [sic] Island, Maryland in USNM (not dissected).
- fuscopurpurella** Dietz, 1910: 9, **Blastobasis plummerella** var.; HOLOTYPE female, MCZ 2962; Adamski gen. slide no. 2962; United States: Maryland, Plummer's [sic] Island; *Blastobasis plummerella* Dietz.
- fuscousuffusella** Dietz, 1900a: 117, pl. VII, fig. 13, **Dryope**; SYNTYPES (2 of 2), MCZ 14222, male and female; Adamski gen. slide nos. 2215, 2216; United States: Missouri, St. Louis; *Dryoperia fuscousuffusella* (Dietz).
- gigantella** Chambers, 1876b: 219, **Blastobasis**; LECTOTYPE male, MCZ 1551; J. A. Powell gen. slide no. 4005, United States: Colorado; *Holcocera gigantella* (Chambers); Lectotype and 3 paralectotypes in MCZ designated by Powell (1976). One other specimen from Colorado is at MCZ, may not be part of original series.
- grisella** Dietz, 1900a: 116, pl. VII, figs. 12, 12a, 12b (male), 12c (female), **Dryope**; SYNTYPE male, MCZ 14225, Adamski gen. slide no. 2218; United States: Pennsylvania, Hazleton; Missouri, Saint Louis, *Dryoperia grisella* (Dietz); At least 1 syntype lost, 1 syntype from collection of C. V. Riley in USNM (no. 743).
- heidemannella** Dietz, 1900a: 111, pl. VII, fig. 9, **Epigritia**; SYNTYPES (2 of 7), MCZ 2916, females; Adamski gen. slide no. 2208; 1 syntype missing left hindwing, right forewing, and abdomen; United States: Pennsylvania, Bedford County, Sulfer Springs, on *Abies excelsa*, O. Heidemann; *Epigritia ochrocomella* (Clemens); 1 syntype in USNM (type no. 6133) (Adamski gen. slide no. 2483 — male); 4 syntypes lost.
- hulstella** Dietz, 1910: 7, pl. I, fig. 2, **Blastobasis**; HOLOTYPE female, MCZ 2977; Adamski gen. slide no. 2042; United States: Texas, G. Hulst.
- iceryaella** Riley, 1887: 485, **Blastobasis**; SYNTYPES (4?), possible syntypes in MCZ; Adamski gen. slide nos. 2097, 2098 (1 male, 1 female); United States: California, Los Angeles County, Pasadena; *Holcocera iceryaella* (Riley); At least 1 syntype from Alameda Co. and Los Angeles Co., California in USNM.
- ilibella** Dietz, 1910: 57, pl. III, fig. 30, **Holcocera**; SYNTYPES (3 of 3), MCZ 2948, 2 males; Adamski gen. slide nos. 2101, 2102; United States: Maryland, Frederick; 1 syntype missing abdomen.
- inclusa** Dietz, 1910: 51, pl. III, fig. 27, **Holcocera**; HOLOTYPE male, MCZ 2943; Adamski gen. slide no. 2103; United States: Pennsylvania, Hazleton, 20 July 1904.
- insulatella** Dietz, 1910: 50, pl. III, fig. 26, **Holcocera**; SYNTYPES (2 of 2 males), MCZ 2942; Adamski gen. slide nos. 2104, 2105; United States: Colorado, Glenwood Springs, August.
- interpunctella** Dietz, 1910: 67, pl. IV, fig. 39, **Holcocera**; SYNTYPES (3 of 3), MCZ 2938, 2 males, 1 female; Adamski gen. slide nos. 2107, 2108, 2909; United States: Utah, Stockton, T. Spalding.
- livorella** Zeller, 1873: 299, **Blastobasis**; HOLOTYPE male, MCZ 2082; Adamski gen. slide no. 2110; United States: Texas, [Dallas], Boll; *Holcocera livorella* (Zeller).
- luteopulvella** Chambers, 1875d: 73, **Dryope**; SYNTYPE female, MCZ 1438; Adamski gen. slide no. 2178; United States: Kentucky, Chambers; *Pigritia laticapitella* Clemens.
- mediofasciella** Dietz, 1900a: 107, pl. VI, fig. 5, **Pigritia**; HOLOTYPE female, MCZ 2927; Adamski gen. slide no. 2179; United States: [Pennsylvania, Hazleton], July.
- melanostriatella** Dietz, 1910: 66, pl. IV, fig. 38, **Holcocera**; SYNTYPES (7 of 9), MCZ 2937, 2 males; Adamski gen. slide nos. 2111, 2112; 5 syntypes missing abdomens; United States: Pennsylvania, Hazleton; Connecticut, East River, C. R. Ely; Maryland, Frederick; 2 syntypes from Frederick, Maryland, and East River, Connecticut, are lost.
- messelinella** Dietz, 1910: 52, pl. III, fig. 29, **Holco-**

- cera**; SYNTYPES (2 of 2 males), MCZ 2945; Adamski gen. slide nos. 2115, 2116; United States: Maryland, Frederick; Florida, Hastings.
- minnicella** Dietz, 1900a: 116, pl. VII, fig. 15, **Dryope**; SYNTYPES (5 of 5), MCZ 14221; Adamski male gen. slide nos. 2229, 2230 (3 syntypes not dissected); United States: Georgia, Forsyth; *Dryoperia minnicella* (Dietz); 1 syntype without "cotype" label, or lost.
- minorella** Dietz, 1910: 34, pl. II, fig. 17e, **Holcocera chalcifrontella** var.; SYNTYPES (4 of 6), MCZ 2953, female; Adamski gen. slide no. 2077; 3 syntypes not dissected; United States: Pennsylvania, Lewisburg, Chestnut burrs; 2 syntypes lost.
- murtfeldtella** Chambers, 1874a: 50, **Dryope**; SYNTYPES (14), MCZ 1437; Adamski gen. slide nos. 2234 (male), 2235 (female); 8 syntypes with damaged or missing abdomens; 4 syntypes not dissected; United States: Kentucky; *Dryoperia murtfeldtella* (Chambers).
- nubilella** Zeller, 1873: 297, fig. 36, **Blastobasis**; HOLOTYPE female, MCZ 1714; Adamski gen. slide no. 2054; United States: Texas, [Dallas]; *Valentinia glandulella* (Riley).
- obscurella** Dietz, 1900a: 110, **Pigritia**; SYNTYPES (2 of 2), MCZ 2914; Adamski gen. slide no. 2180 (male); 1 syntype missing abdomen; United States: Pennsylvania, Hazleton.
- occidentella** Dietz, 1900a: 115, pl. VII, fig. 14, **Dryope**; HOLOTYPE female, MCZ 11300; United States: California, Kaweah; *Dryoperia occidentella* (Dietz); Missing left forewing and abdomen.
- ochrocephala** Dietz, 1910: 31, **Holcocera**; POSSIBLE SYNTYPE male, MCZ 2952; Adamski gen. slide no. 2123; United States: Maryland, [Plummers Island]; Male syntype from Aurora, West Virginia in USNM (Adamski gen. slide no. 2455).
- ornatella** Dietz, 1900a: 107, pl. VI, fig. 7, **Pigritia**; SYNTYPES (7 females, 1 male), MCZ 2929; Adamski gen. slide nos. 2182, 2183, 2184, 2186, 2187 females, 2185 male; 2 syntypes not dissected; United States: Pennsylvania, Hazleton; 1 specimen erroneously labeled as "*ornatella*" in USNM (Adamski gen. slide no. 2480 — female); 1 erroneously sexed syntype in MCZ.
- pallidotinctella** Dietz, 1900a: 111, pl. VII, fig. 8, Sa (male), 8b (female), **Epigritia**; SYNTYPES (2 of 3), MCZ 2915; both specimens missing abdomens; United States: Pennsylvania, Hazleton; *Epigritia ochromella* (Clemens); Male erroneously labeled as cotype in USNM (Adamski gen. slide no. 2482); 1 syntype lost.
- plagiatella** Dietz, 1910: 40, pl. III, fig. 20, **Holcocera**; HOLOTYPE male, MCZ 2957; Adamski gen. slide no. 2124; United States: Arizona, [Williams].
- plummerella** Dietz, 1910: 8, pl. I, fig. 4, **Blastobasis**; SYNTYPES (2 males of 6), MCZ 2961; Adamski gen. slide no. 2043 (one specimen missing abdomen); United States: Maryland, Plummer's [sic] Island; 3 syntypes in USNM (not dissected); 1 syntype lost.
- pulchella** Dietz, 1910: 20, pl. II, figs. 12, 12a, **Euresia**; HOLOTYPE male, MCZ 2967; Adamski gen. slide no. 2058; United States: District of Columbia, Washington.
- purpurella** Dietz, 1900a: 105, **Pigritia**; SYNTYPES (3 of 3 females), MCZ 2926; Adamski gen. slide nos. 2188, 2189, 2190; United States: Pennsylvania, Hazleton.
- pusilla** Dietz, 1910: 65, pl. IV, fig. 37, **Holcocera**; HOLOTYPE male, MCZ 2935; Adamski gen. slide no. 2139; United States: Texas, Brownsville.
- quaintancella** Dietz, 1910: 15, pl. I, fig. 9, **Valentinia**; SYNTYPES (2 females of 6), MCZ 2965; Adamski gen. slide nos. 2055, 2056; United States: locality unknown, bred from apple, Quaintance; 4 syntypes in USNM; 1 dissected (Adamski gen. slide no. 2416 — female), 2 missing abdomens, 1 with broken ovipositor.
- quisquiliella** Zeller, 1873: 298, **Blastobasis**; SYNTYPES (3 of 5), MCZ 1712, 1 male and 2 females; Adamski gen. slide nos. 2072, 2073; United States: Texas, [Dallas]; Boll; *Holcocera chalcifrontella quisquihella* (Zeller); 1 female is missing abdomen.
- reductella** Dietz, 1910: 45, **Holcocera funebra** var.; SYNTYPES (1 of 2), MCZ 2959, Adamski gen. slide no. 2095 (male); Canada: Manitoba, Aweme, Criddle; 1 syntype in USNM (missing abdomen).
- rufopunctella** Dietz, 1910: 65, **Holcocera**; HOLOTYPE female, MCZ 2936; Adamski gen. slide no. 2140; United States: Colorado, Denver, Oslar.
- sagittella** Dietz, 1910: 9, pl. I, fig. 5, **Blastobasis**; HOLOTYPE male, MCZ 2964; Adamski gen. slide no. 2046; United States: Pennsylvania, Hazleton [Aug. 2, 1898].
- sciaphilella** Zeller, 1873: 295, fig. 34, **Blastobasis**; HOLOTYPE male, MCZ 1713; Adamski gen. slide no. 2141; United States: Texas, [Dallas]; Boll; *Holcocera sciaphilella* (Zeller).
- simplicella** Dietz, 1910: 9, **Blastobasis plummerella** var.; HOLOTYPE male, MCZ 2963; Adamski gen. slide no. 2045; United States: Iowa, Iowa City; Specimen originally misidentified as female.
- simulella** Dietz, 1910: 52, pl. III, fig. 28, **Holcocera**; SYNTYPES (2 of 4), MCZ 2944, female; Adamski gen. slide no. 2143; 1 syntype missing abdomen; United States: Arizona, Williams; Texas, Fedora; 1 syntype from Williams, Arizona in USNM (Adamski gen. slide no. 2459 — female); syntype from Stockton, Utah lost.

**spoliatella** Dietz, 1900: 110, **Pigritia**; SYNTYPES (2 of 2 males), MCZ 2913; Adamski gen. slide nos. 2191, 2192; 1 syntype missing left forewing and abdomen; United States: Pennsylvania, Hazleton; An additional damaged MCZ specimen is probably not a syntype. 1 specimen erroneously labeled co-type in USNM.

**spoliatella** Dietz, 1910: 53, **Holococera messelinella** var.; SYNTYPES (3 of 6), MCZ 2946, 3 males; Adamski gen. slide nos. 2117, 2118, 2119; United States: Pennsylvania, Hazleton; *Holococera messelinella* Dietz: 3 syntypes lost including those from New Jersey.

**spretella** Dietz, 1910: 58, pl. IV, fig. 32, **Holococera**; SYNTYPE (1 of 4), MCZ 2931; Adamski gen. slide no. 2145 — female; United States: Arizona, Phoenix; 3 syntypes from Williams, Arizona in USNM (Adamski gen. slides nos. 2144 — female, 2460 — male).

**subsenella** Zeller, 1873: 302, **Hypatima punctiferella** var.; HOLOTYPE male, MCZ 1716; Adamski gen. slide no. 2126; United States: Texas, [Dallas], Boll; *Holococera punctiferella subsenella* (Zeller); Missing left wings; right forewing in gelatin capsule.

**tartarella** Dietz, 1910: 64, pl. IV, fig. 36, **Holococera**; SYNTYPES (3 of 9), MCZ 2934, 1 male, 1 female; Adamski gen. slide nos. 2146, 2147; 1 not dissected; United States: Maryland, Plummer's [sic] Island, A. Buseck; 3 syntypes in USNM; 2 missing abdomens; 1 dissected (Adamski gen. slide no. 2461 — male); 3 syntypes lost.

**tenebrella** Dietz, 1900a: 116, **Dryope**; SYNTYPES (2 of 3), MCZ 14220, 1 male, Adamski gen. slide no. 2233; United States: Pennsylvania, Hazleton; *Dryoperia tenebrella* (Dietz); 1 syntype missing abdomen; 1 syntype lost.

**triangularisella** Chambers, 1875b: 256, **Holococera**; SYNTYPE (1 male of 2) MCZ 1550; Adamski gen. slide no. 2142; United States: [Kentucky, Chambers]; *Holococera sciaphilella* (Zeller).

**tristella** Dietz, 1900a: 108, **Pigritia**; SYNTYPES (2 of 2 females) MCZ 2911; Adamski gen. slide nos. 2193, 2194; United States: Pennsylvania, Hazleton; 1 specimen erroneously labeled as "type" (type no. 6132) in USNM.

**vestaliella** Dietz, 1910: 63, pl. IV, fig. 35, **Holococera**; SYNTYPES (3 of 6), MCZ 2933, all missing abdomens; United States: Maryland, Plummer's [sic] Island, Pennsylvania, Hazleton; 2 male syntypes from Plummer's Island, Maryland (R. B. Selander gen. slide no. 703 and Adamski gen. slide no. 2469) in USNM; 1 syntype from Cohasset, Massachusetts, lost.

**ynecaeccolella** Dietz, 1910: 7, pl. I, fig. 3, **Blastobasis**; SYNTYPES (2 of 5) MCZ 2979, male and female; Adamski gen. slide nos. 2047, 2048; United States:

Texas, bred from *Yucca baccata*, emerged 18 April 1897; 3 syntypes in USNM (not dissected).

**zelleriella** Dietz, 1910: 62, pl. IV, fig. 34, **Holococera**; SYNTYPES (2 of 2 males), MCZ 2081; Adamski gen. slide nos. 2148, 2149; United States: Texas, Dallas; Only 1 male has locality label.

## Family Momphidae

**albocapitella** Chambers, 1875d: 33, **Laverna**; SYNTYPE, MCZ 1374; United States: Texas, Basque [sic] County, September; *Mompha murtfeldtella* (Chambers).

**bicristatella** Chambers, 1880b: 187, **Elachista**; SYNTYPE, MCZ 1355; United States: Texas, Belfrage; *Mompha bicristatella* (Chambers).

**cephalonthiella** Chambers, 1871b: 221, **Laverna**; SYNTYPES (6), MCZ 1372; United States: Kentucky, Chambers; *Mompha cephalonthiella* (Chambers).

**circumscripella** Zeller, 1873: 312, fig. 42, **Laverna**; PSEUDOTYPE, MCZ 1380; United States: Texas, Dallas, Boll; *Mompha circumscripella* (Zeller).

**coloradella** Chambers, 1877d: 136, **Laverna**(?); SYNTYPE, MCZ 1379; United States: Colorado, Edgerton, July; *Mompha coloradella* (Chambers).

**definitella** Zeller, 1873: 111, fig. 41, **Laverna**; SYNTYPE, MCZ 1377; United States: Texas, Dallas, Boll; *Mompha definitella* (Zeller).

**grisseella** Chambers, 1875c: 295, **Laverna**; PSEUDOTYPES (2), MCZ 14970; *Mompha murtfeldtella* (Chambers); MCZ has 2 specimens from Kentucky, but description was based on 3 specimens from Spanish Bar, Colorado.

**ignobilisella** Chambers, 1875d: 33, 51, **Laverna**; SYNTYPE, MCZ 1519; United States: Texas, Basque [sic] County, September; *Mompha ignobilisella* (Chambers).

**murtfeldtella** Chambers, 1875b: 237, **Laverna**; HOLOTYPE, MCZ 1375; United States: [Missouri, 15 September 1874, Murtfeldt]; *Mompha murtfeldtella* (Chambers).

**obscurusella** Chambers, 1875d: 53, **Laverna**; HOLOTYPE, MCZ 1371; United States: Texas, Basque [sic] County; *Mompha murtfeldtella* (Chambers).

**oenotheraesemenella** Chambers, 1876b: 138, **Laverna**; SYNTYPE, MCZ 14969; United States: Missouri; *Mompha brevittella* (Clemens).

**tricristatella** Chambers, 1875e: 211, **Leucophryne**; SYNTYPE, MCZ 1381; Canada; *Mompha tricristatella* (Chambers).

**unifasciella** Chambers, 1876b: 159, **Laverna**; SYNTYPE, MCZ 1378; United States: California; *Mom-*



*pha unifasciella* (Chambers); Missing hindwings and abdomen.

### Family Agonoxenidae

**bieristatella** Chambers, 1875e: 210, **Gelechia**; SYNTYPES (2), MCZ 1459; Canada; *Blastodaena bieristatella* (Chambers).

**bipunctella** Chambers, 1880: 187, **Actia**; SYNTYPE, MCZ 1360; United States: Texas.

### Family Cosmopterigidae

**albalineella** Chambers, 1878c: 95, **Eriphia?**; HOLOTYPE female, MCZ 14965; United States: Texas, Bosque County; *Eralea albalineella* (Chambers).

**concolorella** Chambers, 1875d: 55, **Elachista?**; HOLOTYPE female, MCZ 1352; United States: Texas, Bosque County; *Periploca orichaleella* (Clemens).

**concolorella** Chambers, 1875d: 55, **Eriphia**; LECTOTYPE male, MCZ 1356; United States: Texas; *Ithome concolorella* (Chambers); Lectotype designated by Hodges (1961b: 87), also 3 paralectotypes in MCZ.

**determinatella** Zeller, 1873: 289, **Oecophora**; HOLOTYPE male, MCZ 1710; United States: Texas; *Triclonella determinatella* (Zeller).

**erransella** Chambers, 1874a: 52, **Perimede**; HOLOTYPE, MCZ 1521; United States: Kentucky, Covington, Chambers; Description based on one specimen, but 4 specimens present in MCZ.

**gleditschiaecella** Chambers, 1876b: 135, **Laverna(?) (Anybia?)**; LECTOTYPE male, MCZ 1373; United States: Kentucky, Chambers; *Periploca gleditschiaecella* (Chambers); Lectotype designated by Hodges (1962a: 88), also paralectotype in MCZ.

**miscelorella** Chambers, 1875d: 51, **Laverna**; LECTOTYPE male, MCZ 1370; United States: Texas, Bosque County; *Walshia miscelorella* (Chambers); Lectotype designated by Hodges (1961a: 70).

**montisella** Chambers, 1875e: 297, **Cosmopteryx** [sic]; HOLOTYPE, MCZ 14967; United States: Colorado, Spanish Bar; *Cosmopteryx montisella* Chambers.

**nigrilineella** Chambers, 1878c: 96, **Eriphia?**; HOLOTYPE male, MCZ 1357; United States: Texas, Bosque County; *Melanocinclis nigrilineella* (Chambers).

**ostryaecella** Chambers, 1874a: 74, **Aeaea**; HOLOTYPE male, MCZ 14966; United States: Kentucky; *Stilbosis ostryaecella* (Chambers).

**purpuriella** Chambers, 1874a: 73, **Chrysopoleia**; SYNTYPES (3), MCZ 1358; United States: Kentucky.

**quadrucostatella** Chambers, 1880b: 186, **Aeaea**; HOLOTYPE male, MCZ 1359; United States: Texas, Waco; *Stilbosis quadrucostatella* (Chambers).

**4-lineella** Chambers, 1878c: 95, **Cosmopteryx** [sic]; HOLOTYPE female, MCZ 1518; United States: Texas, Bosque County; *Cosmopteryx quadrilineella* Chambers.

**sexnotella** Chambers, 1878c: 88, **Gelechia**; HOLOTYPE, MCZ 1542; United States: Texas, Bosque County; *Stagnatophora sexnotella* (Chambers).

**unimaculella** Chambers, 1875d: 94, **Ithome**; LECTOTYPE male, MCZ 1520; United States: Texas; *Ithome concolorella* (Chambers); Lectotype designated by Hodges (1961b: 87), and paralectotype in MCZ.

### Family Scythrididae

**albapenella** Chambers, 1875d: 11, **Butalis**; SYNTYPE male, MCZ 1516; United States: Texas, Basque [sic] County, October; "*Scythris*" *albapenella* (Chambers) [misplaced]; Specimen in poor condition, missing left wings, and part of thorax.

**arizoniella** Kearfott, 1907: 8, **Holcoecera**; SYNTYPE, MCZ 15022; United States: Arizona, Phoenix, October, Kunze; *Scythris cburnea* (Walsingham).

**immaculatella** Chambers, 1875d: 10, **Butalis**; SYNTYPE, MCZ 1515; United States: Texas, Basque [sic] County, April; *Scythris impositella* (Zeller).

**plausipennella** Chambers, 1875d: 10, **Butalis**; SYNTYPE, MCZ 1517; United States: Texas, Basque [sic] County; *Scythris plausipennella* (Chambers); Missing left wings.

### Family Gelechiidae

**albmargineella** Chambers, 1875c: 291, **Gelechia**; SYNTYPE male, MCZ 2992; United States: Colorado, Grand River; *Gnorimoschemia albmargineella* (Chambers); Abdomen and left wings missing. Specimen (MCZ 2992) probably is incorrectly labelled Kentucky. It matches a specimen from West Fork of Oak Creek, Coconino County, Arizona; and the type locality is Grand River, Colorado.

**albistrigella** Chambers, 1872a: 171, **Gelechia**; "SYNTYPES" (2), MCZ 1522; United States: Kentucky, June, Chambers; *Untomia albistrigella* (Chambers); *Untomia albistrigella* was described from a single specimen; one of the specimens is a false type.

**amorphaecella** Chambers, 1877a: 124, **Gelechia**; SYNTYPES (3 of 4), MCZ 1460; United States: Colorado, Edgerton, Chambers; *Filatima ornatifimbriella* (Clemens).

- anarsiella** Chambers, 1877a: 126, **Gelechia**; SYNTYPES (8), MCZ 1484; United States: Colorado, Edgerton, Chambers.
- apicistrigella** Chambers, 1872a: 66, **Parasia**; HOLOTYPE female, MCZ 1523; United States: Kentucky, Chambers; *Battaristis nigratomella* (Clemens): Specimen lacks abdomen and right hindwing.
- atrupictella** Dietz, 1900: 350, **Eucordylea**; HOLOTYPE male, MCZ 2986; United States: Pennsylvania, Hazleton; *Coleotechnites atrupictella* (Dietz).
- basifasciella** Zeller, 1873: 269, **Gelechia (Poecilina?)**; HOLOTYPE male, MCZ 2988; United States: Texas, Boll; *Pseudotephusa basifasciella* (Zeller).
- basistrigella** Zeller, 1873: 270, **Gelechia**; HOLOTYPE female, MCZ 2981; United States: Texas, Boll; *Xenolechia basistrigella* (Zeller).
- bifasciella** Chambers, 1874a: 76, **Gelechia**; SYNTYPES (2), MCZ 1362; United States: Kentucky, Chambers; *Theisoa constrictella* (Zeller).
- bifidella** Dietz, 1900: 351, **Nealyda**; SYNTYPE male, MCZ 2990; United States: Colorado, Glenwood Springs.
- bimaculella** Chambers, 1877d: 122, **Nothris?**; HOLOTYPE male, MCZ 1557; United States: Colorado, Edgerton; *Dichomeris georgiella* (Walker).
- bimaculella** Chambers, 1872a: 108, **Depressaria**; SYNTYPE female, MCZ 1524; United States: Kentucky, Chambers; *Fascista bimaculella* (Chambers).
- biminimaculella** Chambers, 1880b: 183, **Gelechia**; SYNTYPES (2), MCZ 1525; United States: Texas, Waco, Belfrage; *Filatima biminimaculella* (Chambers).
- bicolorella** Chambers, 1872a: 195, **Agnippe**; SYNTYPE female, MCZ 1281; United States: Kentucky, Chambers.
- bosqueella** Chambers, 1875d: 92, **Oecophora**; SYNTYPE female, MCZ 1443; United States: Texas; *Stegasta bosqueella* (Chambers); Right hindwing missing.
- canopolvella** Chambers, 1878c: 91, **Gelechia**; HOLOTYPE female, MCZ 1452; United States: Texas, Bosque County; *Filatima obscurusuffusella* (Chambers).
- cercerisella** Chambers, 1872a: 108, **Depressaria**; SYNTYPES (2), MCZ 1427; United States: Kentucky, Chambers; *Fascista cercerisella* (Chambers); Specimens are double mounted on one block of pith. Male lacks head; female lacks left forewing and abdomen.
- cilalincella** Chambers, 1874b: 242, **Gelechia**; SYNTYPE male, MCZ 1428; United States: Texas; *Isophrictis cilalincella* (Chambers).
- collinusella** Chambers, 1877d: 128, **Gelechia**; HOLOTYPE male, MCZ 1526; United States: Colorado, Edgerton; *Gnorimoschema collinusella* (Chambers); Right wings only.
- concinusella** Chambers, 1875b: 253, **Gelechia**; SYNTYPES (2), MCZ 1460; United States: Texas; *Battaristis concinusella* (Chambers).
- consonella** Zeller, 1873: 251, **Gelechia**; SYNTYPE male, MCZ 2982; United States: Texas, Boll; *Anacamptis rhoifruetella* (Clemens).
- costarufuella** Chambers, 1874b: 240, **Gelechia**; LECTOTYPE, MCZ 1527; United States: Texas, Chambers; *Dichomeris costarufuella* (Chambers); Lectotype designated by Hodges (1986: 114).
- creseentifasciella** Chambers, 1874b: 237, **Gelechia**; SYNTYPES (7), MCZ 1477; United States: Texas; *Compsolechia creseentifasciella* (Chambers).
- crystalata** Chambers, 1875b: 241, **Gelechia**; SYNTYPES (2), MCZ 1472; United States: Kentucky, Chambers; *Coleotechnites crystalata* (Chambers).
- crisifasciella** Chambers, 1878c: 87, **Gelechia**; SYNTYPE female, MCZ 1474; United States: Kentucky, 11 May [no year stated], Chambers; *Arogalea crisifasciella* (Chambers); Worn specimen. Described from two syntypes.
- curvistrigella** Chambers, 1872a: 133, **Telphusa**; SYNTYPE female, MCZ 2939; United States: Kentucky, Chambers; *Telphusa longifasciella* (Clemens); Abdomen missing.
- depressostrigella** Chambers, 1874b: 236, **Gelechia**; SYNTYPES (2), MCZ 1434; United States: Texas; *Filatima ochreosuffusella* (Chambers).
- disconotella** Chambers, 1878c: 86, **Gelechia**; SYNTYPE, MCZ 1475; United States: Kentucky, Chambers; *Monochroa disconotella* (Chambers); Left wings missing.
- discoocellella** Chambers, 1872a: 194, **Gelechia**; SYNTYPES (4), MCZ 1439; United States: Kentucky, September, Chambers; *Chionodes discoocellella* (Chambers).
- dorsivittella** Zeller, 1873: 265, fig. 20, **Gelechia (Tel-  
eia?)**; HOLOTYPE male, MCZ 1707; United States: Texas, Dallas, Boll; *Coleotechnites vagatioella* (Chambers); Haustellum and abdomen missing.
- dubitella** Chambers, 1872a: 92, **Depressaria?**; LECTOTYPE male, MCZ 1529; United States: Kentucky, Chambers; *Dichomeris jumcidella* (Clemens): Lectotype designated by Hodges (1986: 111).
- elegantella** Chambers, 1874b: 239, **Gelechia**; SYNTYPES (8), MCZ 1494; United States: Texas, Chambers; *Aristotelia elegantella* (Chambers).
- cupatoriella** Chambers, 1872a: 221, **Ypsolophus**; LECTOTYPE male, MCZ 1531; United States: [Kentucky], Chambers; *Dichomeris setosella* (Cle-

- mens); The original description indicates that one specimen was reared; it should be the holotype. None of the specimens bearing MCZ 1531 could be recognized as the one that Chambers described. Hodges (1986: 82) designated one of the four as lectotype.
- fragmentella** Zeller, 1873: 271, *Gelechia* (*Poecilina*?); HOLOTYPE female, MCZ 1706; United States: Texas, Dallas, Boll; *Pseudotelphusa quercinigracella* (Chambers); Specimen lacks right wings and abdomen.
- fuscoeristatella** Chambers, 1875d: 9, *Naera*; SYNTYPES (4), MCZ 1382; United States: Texas.
- fuscoluteella** Chambers, 1872a: 106, *Depressaria*; HOLOTYPE male, MCZ 1462; United States: Kentucky, Chambers; *Gelechia albisparsella* (Chambers); Abdomen missing.
- fuscomaculella** Chambers, 1872a: 170, *Gelechia*; HOLOTYPE male, MCZ 1469; United States: Kentucky, Chambers; *Chionodes fuscomaculella* (Chambers).
- fuscochrella** Chambers, 1872a: 106, *Gelechia*; SYNTYPE female, MCZ 1532; United States: Kentucky, Chambers; *Chionodes mediofuscella* (Clemens).
- fuscopalidella** Chambers, 1875b: 231, *Sinoe*; SYNTYPES (3), MCZ 1533; United States: Kentucky, Chambers; *Sinoe robinella* (Fitch); One specimen has the left forewing; the other specimen has the right forewing.
- fuscopulvella** Chambers, 1872a: 195, *Agnippe*; HOLOTYPE male, MCZ 1282; United States: Kentucky, April, Chambers.
- fuscopulvella** Chambers, 1872a: 170, *Gelechia*; HOLOTYPE female, MCZ 1492; United States: Kentucky, June, Chambers; *Chionodes obscurusella* (Chambers).
- fuscostrigella** Chambers, 1876b: 30, *Polyhymno*; HOLOTYPE male, MCZ 1547; United States: Texas, Belfrage; *Polyhymno luteostrigella* Chambers; Abdomen missing; labial palpus nearly devoid of scales ventrally.
- fuscotaeniaella** Chambers, 1878c: 89, *Gelechia*; HOLOTYPE male, MCZ 1448; United States: Texas; *Rifseria fuscotaeniaella* (Chambers); Head, thorax, and left wings only.
- gilvisopella** Zeller, 1873: 266, *Gelechia*; SYNTYPES (2), MCZ 1708; United States: Texas, Dallas, Boll; *Coleotechnites quercivorella* (Chambers).
- glandiferella** Zeller, 1873: 275, *Gelechia*; PARALLECTOTYPE female, MCZ 1709; United States: Texas; *Deltophora glandiferella* (Zeller); Lectotype in BMNH designated by Sattler (1979: 297).
- glycyrhizacella** Chambers, 1877a: 124, *Gelechia*; HOLOTYPE female, MCZ 1483; United States: Colorado, Edgerton; *Filatima glycyrhizacella* (Chambers); Abdomen missing.
- innocella** Zeller, 1873: 249, *Gelechia* (*Tachyptilia*); SYNTYPE male, MCZ 1721; United States: Texas, Boll; *Anacamptis innocella* (Zeller).
- intermediella** Chambers, 1879a: 89, *Gelechia*; HOLOTYPE female, MCZ 1447; United States: Texas, Bosque County; *Aristotelia intermediella* (Chambers); Labial palpi, metathorax, and abdomen missing.
- inversella** Zeller, 1873: 248, *Epicorthyliis*; HOLOTYPE male, MCZ 1715; United States: Texas, Boll; *Dichomeris inversella* (Zeller).
- latifasciella** Chambers, 1875b: 251, *Gelechia*; PSEUDOTYPE female, MCZ 2940; United States: Missouri, St. Louis; *Telphusa latifasciella* (Chambers); The original description indicates that the moth is light. The specimen (MCZ 2940) is dark and represents the dark form of *latifasciella*.
- lavernella** Chambers, 1874b: 242, *Gelechia*; HOLOTYPE female, MCZ 1473; United States: Texas; *Symmetrischema lavernella* (Chambers).
- leuconota** Zeller, 1873: 268, *Gelechia*; HOLOTYPE male, MCZ 2973; United States: Texas, Boll; *Evippe leuconota* (Zeller).
- liturosella** Zeller, 1873: 265, *Gelechia* (*Lita*); HOLOTYPE female, MCZ 1704; United States: Texas, Dallas, Boll; *Chionodes mediofuscella* (Clemens).
- luteostrigella** Chambers, 1874b: 247, *Polyhymno*; PSEUDOTYPE female, MCZ 1546; United States: Texas; The specimen (MCZ 1546) is a *Colcophora*. The original description applies to the current concept of the gelechiid species *Polyhymno luteostrigella*.
- maculimarginella** Chambers, 1874b: 241, *Gelechia*; SYNTYPES (2), MCZ 1446; United States: Texas; *Chionodes fuscomaculella* (Chambers).
- marmorella** Chambers, 1875b: 239, *Gelechia*; HOLOTYPE, MCZ 1471; United States: Kentucky, Chambers; *Gnorimoschema emancipatum* (Meyrick), REVISED STATUS; *Gelechia marmorella* Chambers, 1875 is a junior primary homonym of *Gelechia marmorella* Doubleday, 1859. *Phthorimaea emancipata* Meyrick, 1925 is an objective replacement name for *Gelechia marmorella* Chambers, 1875.
- minimaculella** Chambers, 1874b: 235, *Gelechia*; HOLOTYPE male, MCZ 1485; United States: Texas; *Aroga thoracalbella* (Chambers).
- minimella** Chambers, 1874b: 243, *Gelechia*; SYNTYPES (2), MCZ 1487; United States: Texas; *Aristotelia pulhusella* (Chambers).
- monumentella** Chambers, 1877d: 125, *Gelechia*; HOLOTYPE male, MCZ 1482; United States: Colo-

- rado, Monument Park; *Scrobipalpa monumentella* (Chambers).
- multifasciella** Chambers, 1875d: 93, **Theisoa**; SYNTYPE, MCZ 1363; United States: Texas.
- nigrella** Chambers, 1875b: 250, **Gelechia**; PSEUDOTYPE, MCZ 1489; United States: Texas; *Synopacma nigrella* (Chambers); The single, abdomenless specimen does not match the original description.
- nonstrigella** Chambers, 1878c: 92, **Dasycera**; HOLOTYPE male, MCZ 1544; United States: Kentucky, Chambers; *Dichomeris nonstrigella* (Chambers).
- obliquifasciella** Chambers, 1880b: 182, **Gelechia**; HOLOTYPE male, MCZ 1470; United States: Texas; *Telphusa longifasciella* (Clemens).
- obliquistrigella** Chambers, 1872a: 65, **Anarsia**; SYNTYPES (2), MCZ 1535; United States: Kentucky, Chambers; *Coleotechnites obliquistrigella* (Chambers).
- obscurousuffusella** Chambers, 1878c: 90, **Gelechia**; SYNTYPE female MCZ 1453; United States: Texas, Bosque County; *Filatima obscurousuffusella* (Chambers); Abdomen and left forewing missing.
- obscurusella** Chambers, 1872a: 106, **Depressaria**; SYNTYPE male, MCZ 1632; United States: Kentucky, Chambers; *Chionodes obscurusella* (Chambers).
- occidentella** Chambers, 1875b: 246, **Gelechia**; SYNTYPE female, MCZ 1464; United States: California, Behrens; *Chionodes occidentella* (Chambers).
- ocellella** Chambers, 1877a: 126, **Gelechia?**; HOLOTYPE male, MCZ 1440; United States: Colorado, Edgerton; *Gelechia bianulella* (Chambers); The holotype is a male, not a female as indicated by Chambers.
- ochreocostella** Chambers, 1878c: 91, **Gelechia**; HOLOTYPE female, MCZ 1455; United States: Texas, Bosque County; *Anacampsis rhoifrutella* (Clemens).
- ochreostrigella** Chambers, 1875b: 247, **Gelechia**; HOLOTYPE male, MCZ 1463; United States: California, Behrens; *Chionodes ochreostrigella* (Chambers); Abdomen missing.
- ochreostrigella** Chambers, 1877a: 126, **Gelechia**; SYNTYPES (3), MCZ 2995; United States: Colorado, Edgerton; *Scrobipalpa henshawiella* [Busek]. The syntypes represent two species.
- olympiadella** Zeller, 1873: 259, **Gelechia**; PSEUDOTYPES 2 males, MCZ 2921; United States: Texas, *Iascidia cercerisella* (Chambers); These specimens were not seen by Zeller when he described the species.
- pallidastrigella** Chambers, 1874b: 244, **Cleodora**; SYNTYPE, MCZ 1561; United States: Texas; *Isophrictis pallidastrigella* (Chambers).
- pallidella** Chambers, 1874b: 245, **Cleodora**; SYNTYPES (2), MCZ 1562; United States: Texas; *Isophrictis pallidella* (Chambers); The specimens are very poor and probably represent two species.
- pallidochrella** Chambers, 1872a: 126, **Depressaria**; HOLOTYPE female, MCZ 1536; United States: Kentucky, May, Chambers; *Symmetrischema pallidochrella* (Chambers).
- pallidochrella** Chambers, 1873a: 188, **Helice**; SYNTYPES (4), MCZ 1620; (13), MCZ 1534; United States: Kentucky, Chambers; *Theisoa pallidochrella* (Chambers); Two MCZ type numbers with associated specimens represent the same species.
- palpiannulella** Chambers, 1872a: 68, **Gelechia**; SYNTYPES (4), MCZ 1493; United States: Kentucky, Chambers; *Monochroa absconditella* (Walker).
- palpilineella** Chambers, 1875b: 252, **Gelechia**; SYNTYPES (3), MCZ 1486; United States: Kentucky, Chambers; *Synopacma palpilineella* (Chambers).
- pedmontella** Chambers, 1877a: 123, **Gelechia**; HOLOTYPE male, MCZ 1478; United States: Colorado, Edgerton; *Gnorimoschema pedmontella* (Chambers).
- pennsylvania** Dietz, 1900b: 353, **Pseudochelaria**; HOLOTYPE female, MCZ 2974; United States: Pennsylvania, Hazleton.
- physaliella** Chambers, 1872a: 173, **Gelechia**; SYNTYPE female, MCZ 33255; United States: Kentucky, Chambers; *Aristotelia physaliella* (Chambers); Chambers described *physaliella* from two specimens reared from *Physalis viscosa* L. The specimen in the MCZ was received from the Peabody Academy collection. A second syntype is in USNM.
- platanella** Chambers, 1872a: 146, **Cirrho**; PSEUDOTYPE male, MCZ 1430; United States: Kentucky, Chambers; *Gelechia albisparsella* (Chambers); *Cirrho platanella* Chambers is a replacement name for *Depressaria albisparsella* Chambers and as such does not have a separate type from the name it replaces. However, no type material of *albisparsella* exists. This specimen could be considered for designation as neotype of *albisparsella*. It has only the head, thorax, and right forewing.
- plutella** Chambers, 1874b: 238, **Gelechia**; PSEUDOTYPES (2), MCZ 1429; United States: Kentucky; *Dichomeris serrativittella* (Zeller); These specimens are from Kentucky, not Texas as stated in the original description, and the color pattern on the forewings is reversed from that of the original description.

- plutella** Chambers, 1874b: 244, **Neda**; SYNTYPES (2), MCZ 1369; United States: Texas; *Megacraspedus plutella* (Chambers); Another syntype in USNM.
- plutella** Chambers, 1875d: 106, **Phaetusa**; PSEUDOTYPES (2), MCZ 1429; United States: Kentucky; *Evippe leuconota* (Zeller); These specimens are from Kentucky, not Texas as stated in the original description. One female syntype in USNM.
- prunifoliella** Chambers, 1873a: 186, **Evippe**; SYNTYPE male, MCZ 1537; United States: Kentucky, Chambers.
- pseudacaciella** Chambers, 1872a: 107, **Depressaria**; SYNTYPES (11), MCZ 1490; United States: Kentucky, Chambers; *Filatima pseudacaciella* (Chambers).
- pudibundella** Zeller, 1873: 273, **Aristotelia**; LECTOTYPE male, MCZ 1441; United States: Texas, Dallas, Boll; Lectotype designated by Forbes (1932: 429).
- quadrinaculella** Chambers, 1874b: 237, **Gelechia**; LECTOTYPE male, MCZ 1436; United States: Texas; *Anacamptis rhoifrutella* (Clemens); The lectotype, present designation, bears the following labels: 1) "Type 1436"; 2) "*Gelechia quadrinaculella* Cham. Texas"; 3) "*Anacamptis rhoifrutella* Clem. = *quadrinaculella* Cham. AB 1902"; 4) "Lectotype R. W. Hodges. It is selected to ensure that the name continues to be associated with *Anacamptis rhoifrutella* (Clemens). The second syntype is a species of *Neodactylota*."
- querciella** Chambers, 1872a: 127, **Depressaria**; SYNTYPES (3), MCZ 1538; United States: Kentucky, Chambers; *Neotelphusa querciella* (Chambers).
- querciella** Chambers, 1872a: 223, **Ypsolophus**; PSEUDOTYPE female, MCZ 1560; United States: Kentucky, Chambers; *Dichomeris ventrella* (Fitch); The identification label reads "*Ypsolophus quercicoella* var. *pomatella* 452/1", and the specimen is *Dichomeris ligulella* Huebner. The original description of *querciella* clearly states that the wings are broad and thus does not apply to this specimen.
- quercinigracella** Chambers, 1872a: 170, **Gelechia**; HOLOTYPE male, MCZ 1701; United States: Kentucky, Chambers; *Pseudotelphusa quercinigracella* (Chambers); Abdomen and right wings missing.
- quercipominella** Chambers, 1872a: 222, **Ypsolophus**; HOLOTYPE female, MCZ 1560; United States: Kentucky, Chambers; *Dichomeris ligulella* Huebner.
- quercivorella** Chambers, 1872a: 173, **Gelechia**; HOLOTYPE female, MCZ 1539; United States: Kentucky, Chambers; *Colcoetchnites quercivorella* (Chambers).
- quinqueannulella** Chambers, 1872a: 191, **Gelechia**; HOLOTYPE female, MCZ 1467; United States: Kentucky, Chambers; *Trypanisma prudens* Clemens.
- reedella** Chambers, 1872a: 222, **Ypsolophus**; SYNTYPES (3), MCZ 1559; United States: Kentucky, Chambers; *Dichomeris ligulella* Huebner; The three specimens are the same species.
- ribesella** Chambers, 1875c: 290, **Gelechia**; HOLOTYPE female, MCZ 2984; United States: Colorado, Spanish Bar, Clear Creek.
- rileyella** Chambers, 1872a: 106, **Depressaria**; SYNTYPE male, MCZ 1431; United States: Kentucky, Chambers; *Gelechia rileyella* (Chambers).
- rubensella** Chambers, 1872a: 193, **Gelechia**; PSEUDOTYPES (3), MCZ 1449; United States: Kentucky, Chambers; *Aristotelia rubidella* (Clemens); The status of these specimens as types is questionable. Chambers described *rubensella* from a single specimen that had its fringes singed by a gas light. None of these is singed.
- rufusella** Chambers, 1874b: 240, **Gelechia**; SYNTYPES (3), MCZ 1444; United States: Texas; *Anacamptis fullonella* (Zeller).
- saphirinella** Chambers, 1875b: 250, **Gelechia**; HOLOTYPE, MCZ 1468; United States: [Kentucky, Chambers]; *Gnorimoschema saphirinella* (Chambers); Labial palpi, right hindwing, and abdomen missing. The right forewing is glued on a block. Although the original description implies Texas as the type locality, the label states "Kentucky./Chambers."
- saundersella** Chambers, 1876b: 173, **Gelechia**; SYNTYPES (2), MCZ 1540; United States: Kentucky, Chambers; *Taygete saundersella* (Chambers).
- scutellariaecla** Chambers, 1873a: 175, **Gelechia**; SYNTYPE male, MCZ 1541; United States: Kentucky, Boone County, Verona; *Scrobipalpa scutellariaecla* (Chambers).
- sella** Chambers, 1874b: 235, **Gelechia**; LECTOTYPE male, MCZ 1481; United States: Texas; *Deltophora sella* (Chambers); Lectotype designated by Sattler (1979: 294).
- serratipalpella** Chambers, 1877a: 123, **Gelechia**; HOLOTYPE male, MCZ 1479; United States: Colorado, Edgerton; *Gnorimoschema serratipalpella* (Chambers); The abdomen is glued to the rest of the specimen.
- serrativittella** Zeller, 1873: 280, **Gelechia**; PARALECTOTYPE female, MCZ 1705; United States: Texas, Dallas, Boll; *Dichomeris serrativittella* (Zeller); Lectotype female in BMNH designated by Hodges (1986: 101).

*sexstrigella* Chambers, 1874b: 248, **Polyhymno?**; SYNTYPES (3), MCZ 1545; United States: Texas; *Calliprora sexstrigella* (Chambers).

*solaniella* Chambers, 1873a: 176, **Gelechia**; PSEUDOTYPE female, MCZ 2453; *Isophrictis similiella* (Chambers); *Gelechia solaniella* Chambers is a replacement name for *Gelechia similiella* Chambers, 1872.

*stramiella* Chambers, 1872a: 224, **Ypsolophus**; LECTOTYPE female, MCZ 1558; United States: Kentucky, Chambers; *Dichomcris punctidiscella* (Clemens); Lectotype designated by Hodges (1986: 54).

*ternariella* Zeller, 1873: 264, **Gelechia** (Lita); HOLOTYPE female, MCZ 1702; United States: Texas, Boll; *Fascista bimaculella* (Chambers).

*texanella* Chambers, 1880b: 179, **Anesychia**; LECTOTYPE male, MCZ 1424; United States: Texas; *Lita texanella* (Chambers); Lectotype designated by Hodges (1966: 30).

*thoracealbella* Chambers, 1874b: 235, **Gelechia**; SYNTYPE male, MCZ 1435; United States: Texas, Waco, Belfrage; *Aroga thoracealbella* (Chambers).

*trialbamaculella* Chambers, 1875b: 250, **Gelechia**; HOLOTYPE female, MCZ 1456; United States, Texas, Waco, Belfrage; *Aroga trialbamaculella* (Chambers); Head and right wings missing.

*trifasciella* Chambers, 1875b: 252, **Gelechia**; SYNTYPES (2), MCZ 1445; United States: Texas, Waco, Belfrage; *Filatima albirella* (Zeller).

*trilineella* Chambers, 1877a: 125, **Gelechia**; SYNTYPES (6), MCZ 1454; United States: Colorado, Edgerton; *Aroga trilineella* (Chambers); One syntype is not conspecific with the other five.

*trimaculella* Chambers, 1874b: 243, **Anarsia**; LECTOTYPE male, MCZ 1556; United States: Texas, Waco, Belfrage; *Isophrictis trimaculella* (Chambers); The lectotype, present designation, bears the following labels: 1) "Type 1536"; 2) "Texas"; 3) "72"; 4) "996"; 5) "trimaculella"; 6) "Lectotype R W Hodges"; 7) "RWH genitalia slide 3314." It is selected to ensure continued use of the name in *Isophrictis*. Three species are represented among the syntypes.

*trimaculella* Chambers, 1874b: 238, **Gelechia**; PARALECTOTYPES (3), MCZ 1476; United States: Texas, Waco, Belfrage; *Helcystogramma melanocarpum* (Meyrick); Lectotype in USNM designated by Hodges (1986: 130).

*trimaculella* Packard, 1867: 61, **Gelechia**; SYNTYPES (2), MCZ 1563; Canada: Labrador, Strawberry Harbor; *Chionodes continuella* (Zeller).

*triocellella* Chambers, 1877a: 127, **Gelechia**; SYNTYPES (6), MCZ 1453; United States: Colorado,

Edgerton; *Gnorimoschema triocellella* (Chambers).

*unctulella* Zeller, 1873: 257, **Gelechia**; HOLOTYPE male, MCZ 1703; United States: Texas, Boll; *Filatima ornatifimbriella* (Clemens).

*variella* Chambers, 1872a: 174, **Gelechia**; SYNTYPES (2 of several), MCZ 1544; United States: Kentucky, Chambers; *Coleotechnites variella* (Chambers); One female syntype is in USNM.

*versutella* Zeller, 1873: 253, **Gelechia**; HOLOTYPE female, MCZ 1457; United States: Texas, Boll.

*violaceofusea* Zeller, 1873: 258, **Gelechia**; HOLOTYPE male, MCZ 2981; United States: Texas, Dallas, Boll; *Chionodes discocelella* (Chambers).

*walsinghami* Dietz, 1900b: 352, **Pseudochelaria**; SYNTYPE male, MCZ 3266; United States: Pennsylvania, Hazleton.

## SUPERFAMILY COPROMORPHOIDEA

### Family Glyphipterigidae

*exoptatella* Chambers, 1875b: 234, **Glyphipteryx** [sic]; HOLOTYPE, MCZ 1564; United States: Kentucky, Linden Grove Cemetery, [June], Chambers; *Diploschizia impigritella* (Clemens); Heppner (1981: 322) gives type locality as "[Covington?, Kenton Co.]."

*montisella* Chambers, 1875c: 292, **Glyphipteryx** [sic]; LECTOTYPE male, MCZ 32887; United States: Colorado, Denver, South Park, 10,000 feet; *Glyphipteryx montisella* Chambers; Lectotype designated by Heppner (1985: 124).

## SUPERFAMILY YPONOMEUTOIDEA

### Family Plutellidae

NOTE: The Walsingham syntypes in this family were sent to Chambers by Walsingham. We suggest that lectotypes should be selected from syntypes at the BMNH because Walsingham's personal collection is there. He most likely sent syntypes (a term not used in the 1880s) to Chambers as examples of his species. Types (holotypes and lectotypes in current terms) he would have retained.

*canariella* Walsingham, 1881: 309, pl. XXXV, fig. 11, **Cerostoma**; SYNTYPES (2), MCZ 14982; United States: California, Lake County, Scott's Valley, 18 May 1871; *Ypsolopha canariella* (Walsingham).

*castella* Walsingham, 1881: 310, pl. XXXV, fig. 13, **Eucreratia**; SYNTYPES (2), MCZ 14984; United States: California, San Francisco.

**dentiferella** Walsingham, 1881: 308, pl. XXXV, fig. 10, **Cerostoma**; SYNTYPES (2), MCZ 14985; United States: California, Mount Shasta, August 1871; *Ypsolopha dentiferella* (Walsingham).

**falciferella** Walsingham, 1881: 307, pl. XXXV, fig. 7, **Cerostoma**; SYNTYPE (1 of 18), MCZ 14988; United States: California and Oregon; *Ypsolopha falciferella* (Walsingham).

**frustella** Walsingham, 1881: 309, pl. XXXV, fig. 12, **Cerostoma**; SYNTYPES (2 of 26), MCZ 14981; United States: California, Shasta County, 28 July 1871; *Ypsolopha frustella* (Walsingham).

**oehrella** Chambers, 1880b: 181, **Plutelloptera**; SYNTYPE, MCZ 1414; United States: Texas, Belfrage; *Ypsolopha ustella* (Clemens); Missing left wings.

**polita** Walsingham, 1881: 302, pl. XXXV, fig. 2, **Calantica**; SYNTYPES (2), MCZ 14992; United States: California; *Eucalantica polita* (Walsingham).

**securella** Walsingham, 1881: 311, pl. XXXV, fig. 14, **Eucercatia**; SYNTYPE (1 of 17), MCZ 14983; United States: California, Sonoma County, May 1871.

**subfasciella** Walsingham, 1881: 303, pl. XXXV, fig. 3, **Araecolepia**; PARALECTOTYPE (1 of 17), MCZ 14986; United States: Oregon, Currant Creek (an affluent of John Day River), 16 April 1872; Lectotype in BMNH designated by Heppner (1982: 278).

**vanella** Walsingham, 1881: 305, pl. XXXV, fig. 6, **Plutella**; SYNTYPE, MCZ 14987; United States: California, San Francisco.

## Family Yponomeutidae

**ceclastrusella** Kearfott, 1903: 150, **Zelleria**; SYNTYPES (2), MCZ 14228; United States: New Jersey, Essex County, "Pk." and Caldwell.

**crassivenella** Zeller, 1872: 563, fig. 27, **Enaemia**; HOLOTYPE female, MCZ 15001; United States: Texas, Dallas, Boll; *Lactura pupula* (Huebner).

## Family Argyresthiidae

**altissimella** Chambers, 1877d: 130, 147, **Argyresthia**; SYNTYPE, MCZ 1412; United States: Colorado, Mount Elbert, 11,000 feet, July.

**austerella** Zeller, 1873: 305, fig. 38, **Argyresthia**; SYNTYPES (3 of 6), MCZ 14254; United States: Texas, Dallas, Boll.

**belangerella** Chambers, 1875e: 145, **Argyresthia**; SYNTYPE, MCZ 1407; Canada; Missing right wings.

**deletella** Zeller, 1873: 305, **Argyresthia**; SYNTYPES (3), MCZ 14254; United States: Texas, Dallas, Boll.

**montella** Chambers, 1877d: 130, **Argyresthia**; SYN-

TYPE, MCZ 1411; United States: Colorado, Edgerton, July.

**pedmontella** Chambers, 1877d: 131, **Argyresthia**; SYNTYPES (2), MCZ 1409; United States: Colorado, Edgerton, July.

**quadririgella** Zeller, 1873: 304, **Argyresthia**; HOLOTYPE male, MCZ 14252; United States: Texas, Dallas, Boll; Missing abdomen.

**querciolella** Chambers, 1877d: 130, **Argyresthia**; SYNTYPES (2), MCZ 1410; United States: Colorado, Edgerton, June.

**thuiella** Packard, 1871: 24, pl. 1, fig. 6, **Bucculatrix**; SYNTYPES, MCZ 14963; United States: Maine, Brunswick, July, on cedar tree; *Argyresthia thuiella* (Packard); Fragments of several specimens in vial.

**undulatella** Chambers, 1874a: 10, **Argyresthia**; SYNTYPES (6), MCZ 1408; United States: Kentucky, Chambers.

## Family Heliodinidae

**abroniaecella** Chambers, 1876b: 217, **Lithariapteryx**; SYNTYPES (9), MCZ 1565; United States: Colorado, Edgerton, over 6000 feet, July.

**bella** Chambers, 1875d: 73, **Aetole**; SYNTYPE, MCZ 1364; United States: Texas, August, Belfrage; *Heliodynes bella* (Chambers).

## SUPERFAMILY SESIOIDEA

### Family Sesiidae

**aurecopurpura** H. Edwards, 1880: 72, **Aegeria**; HOLOTYPE female, MCZ 928; United States: Texas, Dallas, Boll; *Carmenta bassiformis* (Walker).

**caudata** Harris, 1839: 311, **Aegeria**; SYNTYPES (1 male, 1 female), MCZ 26354; United States: [Massachusetts, Neponset River, 30 August 1823, Harris no. 87]; *Alcathoe caudata* (Harris).

**cucurbitae** Harris, 1828: 33, **Aegeria**; SYNTYPES (5 adults and 5 pupal cases), MCZ 33258; United States: [Harris no. 249]; *Melititia cucurbitae* (Harris).

**denudatum** Harris, 1839: 310, **Trochilium**; SYNTYPE, MCZ 26359; United States: [Harris no. 311]; *Sesia asilipennis* (Boisduval).

**fulvipes** Harris, 1839: 312, **Aegeria**; SYNTYPE, MCZ 26361; United States: [Harris no. 17]; *Syanthedon fulvipes* (Harris).

**maculipes** Grote and Robinson, 1868: 184, **Zenodoxus**; PSEUDOTYPE female, MCZ 929; United States: Texas, Dallas, Boll; Not a syntype according to Duckworth and Eichlin (1978: 16).

**marginalatum** Harris, 1839: 309, **Trochilium**; SYN-

TYPE female, MCZ 26356; United States: New Hampshire, [Dublin], L. W. Leonard [Harris no. 385]; *Pennisetia marginata* (Harris).

**nebraskae** H. Edwards, 1881: 181, *Euhagena*; HOLOTYPE male, MCZ 930; United States: Nebraska, Mr. Austin; Broken and in poor condition.

**polistiformis** Harris, 1854: 216, *Aegeria*; SYNTYPES (3 males, 2 females, 3 pupal cases), MCZ 26358; United States: North Carolina, Albermarle, F. J. Kron [Harris no. 791]; *Vitacea polistiformis* (Harris).

**pyri** Harris, 1830: 2, *Aegeria*; SYNTYPE, MCZ 26363; United States: [Massachusetts, Dorchester and Cambridge, Harris no. 702]; *Synanthedon pyri* (Harris); Missing abdomen.

**scitula** Harris, 1839: 313, *Aegeria*; SYNTYPES (2 adults, 1 pupal shell), MCZ 26362; United States: [Harris no. 333]; *Synanthedon scitula* (Harris).

**syringae** Harris, 1839: 311, *Aegeria*; LECTOTYPE male, MCZ 26360; United States: [Harris no. 464]; *Podosesia syringae* (Harris); One male and one female paralectotype, MCZ 26360. Lectotype designated by Purrington and Nielsen (1987: 551).

**tibiale** Harris, 1839: 309, *Trochilium*; SYNTYPE female, MCZ 26355; United States: New Hampshire, [Dublin], L. W. Leonard [Harris no. 387]; *Sesia tibialis* (Harris).

**tricincta** Harris, 1839: 310, *Aegeria*; SYNTYPES (1 male, 1 female), MCZ 26357; United States: [Harris no. 322]; *Paranthrene tabaniformis* (Rottemburg).

## SUPERFAMILY COSSOIDEA

### Family Cossidae

**“crepera** Harris, 1833: 591, *Cossus*”: “SYNTYPE” male, MCZ 26393; United States: New Hampshire, [Dublin], L. W. Leonard, Harris no. 582; *Prionoxystus robiniae* (Peck); The original description of *crepera* is generally cited as Harris (1935a: 592; 1935b: 72), but it is only listed there (as *Cossus crepera*), not described or illustrated. The first description seems to be that of Packard (1864c: 388) as *Xyleutes crepera*.

## SUPERFAMILY TORTRICOIDEA

### Family Tortricidae (including Cochylidae)

**allutana** Zeller, 1875: 295, fig. 27, *Grapholitha*; SYNTYPES (2), MCZ 14325; United States: New York, “371” Speyer, and Texas, Dallas, Boll; *Episimus argutanus* (Clemens)

**amphorana** Walsingham, 1879: 63, pl. LXXIV, fig. 9, *Semasia*; SYNTYPES (2), MCZ 15006; United States: Oregon, John Day River, Camp Watson, April, Walsingham; *Phaneta amphorana* (Walsingham).

**angleseana** Kearfott, 1907a: 64, *Enarmonia*; PARALECTOTYPE, MCZ 15014; United States: New Jersey, Anglesea, V-00 (?), W. D. Kearfott; *Grapholitha angleseana* (Kearfott); Lectotype in AMNH designated by Klots (1942: 398); see also Heinrich (1926: 31).

**bobana** Kearfott, 1907a: 26, *Eucosma*; PARALECTOTYPE, MCZ 14322; United States: Texas, Harris County, 7-5-1899; Described from three syntypes. Heinrich (1923: 103) designated the Salida, Colorado, specimen as lectotype; it is in USNM, not AMNH as he indicated. The third specimen, from Southwest Colorado, is in AMNH (Klots, 1942: 399). See also Powell (1968:10).

**bolanderana** Walsingham, 1879: 42, pl. LXIX, fig. 10, *Paedisca*; SYNTYPE, MCZ 15003; United States: California, Mount Shasta, August 1871, Walsingham; *Eucosma bolanderana* (Walsingham); Missing abdomen.

**cockerellana** Kearfott, 1907a: 71, *Tortrix*; PARALECTOTYPE, MCZ 14320; United States: Colorado, Glenwood Springs, September 1899; *Argyrotaenia cockerellana* (Kearfott); Lectotype male in AMNH designated by Powell (1964: 225).

**constrictana** Zeller, 1875: 305, fig. 36, *Paedisca*; HOLOTYPE male, MCZ 14335; United States: Texas, Dallas, Boll; *Sonia constrictana* (Zeller).

**desertana** Zeller, 1875: 306, fig. 37, *Paedisca*; LECTOTYPE male, MCZ 14338; United States: Texas, Dallas, Boll; *Epiblema desertana* (Zeller); Lectotype designated by Miller (1976: 50).

**dietziana** Kearfott, 1907a: 92, *Epinotia*; PARALECTOTYPES (2), MCZ 14302; United States: Pennsylvania, Hazleton, W. G. Dietz; *Rhopobota dietziana* (Kearfott); Lectotype in AMNH designated by Klots (1942: 401); see also Heinrich (1923: 191).

**dodana** Kearfott, 1907a: 27, *Eucosma*; PARALECTOTYPE, MCZ 15019; United States: SW Colorado, 7-13-1889, W. G. Dietz; Missing abdomen. Lectotype in AMNH designated by Klots (1942: 401); see also Heinrich (1923: 106).

**dodecana** Zeller, 1875: 311, fig. 40, *Paedisca*; SYNTYPES (5), MCZ 14341; United States: Texas, Dallas, Boll; *Pelochrista scintillana* (Clemens).

**eclipsana** Zeller, 1875: 298, fig. 29, *Grapholitha* [sic]; HOLOTYPE male, MCZ 14328; United States: Texas, Dallas, Boll; Missing abdomen.

**ednana** Kearfott, 1907c: 161, pl. VIII: fig. 13, *Phalonia*; PARALECTOTYPES (2), MCZ 15017; United



- States: Pennsylvania, Hazleton; *Anopina ednana* (Kearfott); Lectotype in AMNH designated by Klots (1942: 417).
- exasperatana** Zeller, 1875: 238, **Tortrix**; SYNTYPES (2), MCZ 14309; United States: Texas, Dallas, Boll; *Platynota exasperatana* (Zeller).
- fagigemmacana** Chambers, 1878b: 74, **Exartema**; SYNTYPE, MCZ 15007; United States: Kentucky, Chambers; *Olethreutes fagigemmacana* (Chambers); Wings only, plus pupal case. Chambers refers to a single specimen in the MCZ, but then describes both sexes.
- fragariana** Packard, 1869: 335, **Lozotaenia**; SYNTYPE, MCZ 14315; United States: Maine; *Clepsis persicana* (Fitch); Missing abdomen.
- frigidana** Packard, 1856: 57, **Penthina**; LECTOTYPE male, MCZ 14306; Canada: Labrador; *Apotomis frigidana* (Packard); This species was described from two syntypes. Adamski and Peters (1986: 664) designated the lectotype (Code, Art. 74(b)). The male paralectotype is also in MCZ.
- frustrana** Comstock, 1880: 236, **Retinia**; PSEUDOTYPES (23+), MCZ 30298; United States: Massachusetts, Nantucket Island, S. H. Scudder; *Rhyacionia frustrana* (Comstock); The name *Retinia frustrana* was published by both Comstock (1880) and Scudder (1883). These specimens are Scudder's invalid type series. The lectotype in USNM designated by Miller (1967: 591).
- fulvifrontana** Packard, 1866: 59, **Penthina**; SYNTYPES (2), MCZ 14305; Canada: Labrador; *Olethreutes septentrionana* (Curtis).
- glaucifuseana** Zeller, 1875: 245, **Conchylis**; HOLOTYPE female, MCZ 14303; United States: Texas, Dallas, Boll.
- gomonana** Kearfott, 1907b: 78, **Eucosma**; PARALECTOTYPE, MCZ 15021; United States: New Jersey, Essex County, 5-11-1900, W. D. Kearfott; Lectotype in AMNH designated by Klots (1942: 403); see also Heinrich (1923: 119).
- haimbachiana** Kearfott, 1907a: 51, **Epinotia**; PARALECTOTYPE, MCZ 14300; United States: Pennsylvania, Philadelphia, VI-23-1904, F. Haimbach; *Gypsonoma haimbachiana* (Kearfott); Lectotype in AMNH designated by Klots (1942: 403); see also Heinrich (1923: 163).
- inimicella** Zeller, 1872: 559, fig. 20, **Galleria**; HOLOTYPE male, MCZ 14275; United States: Texas, Dallas, Boll; *Pseudogalleria inimicella* (Zeller).
- leucophaleratana** Packard, 1866: 56, **Pandemis**; SYNTYPE, MCZ 14331; Canada: Labrador; *Ancylys tincana* (Huebner).
- longipalpana** Powell, 1985: 67, **Syllonoma**; HOLOTYPE male; United States: South Carolina, Horry County, Myrtle Beach, 9 July 1943, C. T. Parsons.
- maireidana** Zeller, 1875: 260, **Phoxopterus**; SYNTYPE male, MCZ 14330; United States: Texas, Dallas, Boll; *Ancylys platanana* (Clemens).
- merrikanum** Kearfott, 1907c: 156, pl. VIII, fig. 1, **Exartema**; PARALECTOTYPE, MCZ 15016; United States: Pennsylvania, New Brighton, VII-5-1904, H. D. Merriek; *Olethreutes merrikanana* (Kearfott); Lectotype in AMNH designated by Klots (1942: 405); see also Heinrich (1926: 149).
- miscana** Kearfott, 1907a: 91, **Eucosma**; LECTOPARATYPE, MCZ 15020; United States: California, Placer County, Cisco; *Epinotia miscana* (Kearfott); Lectotype in AMNH designated by Klots (1942).
- murina** Packard, 1867:60, **Penthina**; LECTOTYPE male, MCZ 14307; Canada: Labrador, Caribou Island; *Olethreutes metallicana* (Huebner); Lectotype designated by Miller (1985: 410); also paralectotype male.
- nebulosana** Packard, 1866: 61, **Grapholitha**; SYNTYPE male, MCZ 14312; Canada: Labrador; *Gypsonoma nebulosana* (Packard); An additional MCZ specimen may be a syntype. Heinrich (1923: 261) cites a male "type" in the Fernald collection.
- niveosana** Packard, 1866: 55, **Sciaphila**; SYNTYPES (6), MCZ 14313; Canada: Labrador; *Eana niveosana* (Packard).
- numerosana** Zeller, 1876: 317, **Paedisca**; HOLOTYPE male, MCZ 14339; United States: Texas, Dallas, Boll; *Epiblema numerosana* (Zeller).
- ochromediana** Kearfott, 1907a: 11, **Olethreutes**; PARALECTOTYPE, MCZ 14332; United States: Pennsylvania, Hazleton, 6/21/1902; *Olethreutes osmundana* (Fernald); Lectotype in AMNH designated by Heinrich (1926: 170).
- olivaceana** Fernald, 1882: 71, **Eccopsis**; PARALECTOTYPES (2), MCZ 14334; United States: [no data]; *Olethreutes olivaceana* (Fernald); Lectotype in USNM designated by Miller (1970: 292).
- osmundana** Fernald, 1879: 156, **Penthina**; PARALECTOTYPE, MCZ 15010; United States: Maine, Orono, feeding on *Osmunda regalis*, emerged 1 July 1879, A. Allen; *Olethreutes osmundana* (Fernald); Lectotype in USNM designated by Miller (1970: 292).
- packardi** Zeller, 1875: 300, fig. 31, **Grapholitha** [sic]; HOLOTYPE, MCZ 14329; United States: Texas, Dallas, Boll; Missing abdomen.
- peculiana** Zeller, 1875: 210, fig. 1, **Teras**; HOLOTYPE female, MCZ 14316; United States: Texas, Dallas, Boll; *Acleris subnitana* (Walker).

- perfluana* Zeller, 1875: 299, fig. 30, **Grapholitha** [sic]; HOLOTYPE female, MCZ 14327; United States: Texas, Dallas, Boll; *Sereda tautana* (Clemens).
- pinatubana* Kearfott, 1905: 9, **Eulia**; PARALECTOTYPE, MCZ 14344; United States: Massachusetts, Winchendon, V-26-1902; *Argyrotaenia pinatubana* (Kearfott); Lectotype in AMNH designated by Klots (1942: 415).
- plumbolineana* Kearfott, 1907a: 53, **Epinothia**; PARALECTOTYPE, MCZ 14301; Canada: British Columbia, Wellington; Lectotype in AMNH designated by Klots (1942).
- primulana* Walsingham, 1879: 45, pl. LXX, fig. 7, **Paedisca**; SYNTYPE, MCZ 15004; United States: California, Mendocino County, 10 June 1871, Walsingham; *Eucosma primulana* (Walsingham).
- prosperana* Kearfott, 1907b: 128, **Enarmonia**; PARALECTOTYPE, MCZ 15013; United States: California, San Luis Obispo, III-[no year], A. H. Vachell; *Cydia prosperana* (Kearfott); Lectotype in AMNH designated by Klots (1942: 405); see also Heinrich (1926: 57).
- ptychogrammos* Zeller, 1875: 213, **Teras hastiana** variety; HOLOTYPE male, MCZ 14317; United States: Texas, Dallas, Boll; *Acleris ptychogrammos* (Zeller); Missing abdomen and hindwings.
- quintana* Zeller, 1875: 304, figs. 34, 35, **Paedisca**; SYNTYPES (2), MCZ 14340; United States: Texas, Dallas, Boll; *Eucosma robinsonana* (Grote).
- ravacana* Kearfott, 1907a: 44, **Thiodia**; PARALECTOTYPE, MCZ 14326; United States: [no locality], ["8-12-99"]; *Phaeta ravacana* (Kearfott); Lectotype in AMNH designated by Heinrich (1923: 41).
- seriatana* Zeller, 1875: 244, **Conchyliis**; HOLOTYPE male, MCZ 14304; United States: Texas, Dallas, Boll; *Aethes seriatana* (Zeller).
- sescuplana* Zeller, 1875: 220, **Tortrix**; SYNTYPES (4), MCZ 14314; United States: Texas, Dallas, Boll; *Clepsis virescana* (Clemens).
- spaldingana* Kearfott, 1907a: 19, **Eucosma**; PARALECTOTYPE, MCZ 14321; United States: Utah, Stockton, "VII-26-3", T. Spaulding; Lectotype in AMNH designated by Klots (1942: 410); see also Heinrich (1923: 54).
- spiculana* Zeller, 1875: 289, fig. 23, **Grapholitha**; HOLOTYPE female, MCZ 14324; United States: Texas, Dallas, Boll; *Phaeta spiculana* (Zeller); Missing abdomen and right forewing.
- terraoctana* Walsingham, 1879: 39, **Paedisca**; SYNTYPE, MCZ 15005; United States: California, Mount Shasta; *Epinothia terraoctana* (Walsingham); This species was described from 7 syntypes from Mount Shasta. Six syntypes and an additional 24 specimens from Mount Shasta and Mendocino City are now in the BMNH. Like other Walsingham California syntypes in the MCZ, this specimen does not bear labels in Walsingham's own handwriting, but was presumably received by Chambers.
- tessellana* Packard, 1866: 58, **Penthina**; SYNTYPES (6), MCZ 14308; Canada: Labrador; *Olethreutes intermistana* (Clemens).
- testulana* Zeller, 1875: 241, **Cenopsis**; HOLOTYPE male, MCZ 14311; United States: Texas, Dallas, Boll; *Sparganothis directana* (Walker).
- trifureculana* Zeller, 1875: 226, **Tortrix**; SYNTYPE, MCZ 14319; United States: Texas, Dallas, Boll; *Argyrotaenia quercifoliana* (Fitch); Missing left forewing.
- tripartitana* Zeller, 1875: 308, fig. 39, **Paedisca**; HOLOTYPE female, MCZ 14337; United States: Texas, Dallas, Boll; *Epiblema tripartitana* (Zeller).
- tristriata* Kearfott, 1907a: 67, **Sparganothis**; SYNTYPE, MCZ 14310; United States: Minnesota, Duluth, ["15. Fern/new"]; Missing right forewing, 1 cotype in AMNH (Klots, 1942: 416).
- variolana* Zeller, 1875: 212, **Teras**; HOLOTYPE male, MCZ 14318; United States: Texas, Dallas, Boll; *Acleris minuta* (Robinson).
- vertumnana* Zeller, 1875: 310, **Paedisca**; LECTOTYPE female, MCZ 14336; United States: Texas, Dallas, Boll; *Epinothia vertumnana* (Zeller); Lectotype designated by Brown (1987: 343).
- verutana* Zeller, 1875: 247, **Bactra lanceolana** variety; SYNTYPES (2), MCZ 14333; United States: Texas, Dallas, Boll; *Bactra verutana* Zeller.
- vestaliana* Zeller, 1875: 286, fig. 21, **Grapholitha** [sic]; HOLOTYPE male, MCZ 14323; United States: Texas, Dallas, Boll; *Hystriophora vestaliana* (Zeller); The holotype is a male, not a female as stated by Zeller.
- vitivorana* Packard, 1869: 336, pl. 8, fig. 22, **Penthina**; SYNTYPE, MCZ 15008; United States: Ohio, Hudson, M. C. Reed; *Endopiza viteana* Clemens; Missing abdomen and right hindwing.
- worthingtoniana* Fernald, 1878: 83, **Paedisca**; SYNTYPE, MCZ 14342; United States: "North Illinois", [June], C. E. Worthington; *Eucosma bipunctella* (Walker).
- zana* Kearfott, 1907a: 61, **Enarmonia**; PARALECTOTYPE, MCZ 15015; Canada: British Columbia, Wellington, VI-[no year], T. Bryant; *Grapholita caeruleana* Walsingham; Lectotype in AMNH designated by Klots (1942: 412); see also Heinrich (1926: 31).

## SUPERFAMILY ZYGAENOIDEA

## Family Zygaenidae

**sanborni** Packard, 1864a: 32, **Harrisina**; HOLOTYPE [?], MCZ 27316; United States: Virginia, Alexandria, J. O. Treat; *Acoloitus falsarius* Clemens; This may not be the holotype, which was "loaned . . . by Mr. Sanborn."

## Family Limacodidae

**bifida** Packard, 1864c: 338, **Euclea**; SYNTYPES [?] (2 males), MCZ 16028; United States: Maine, Brunswick, "at light", August; *Euclea delphinii* (Boisduval).

**biguttata** Packard, 1864c: 341, **Limacodes**; SYNTYPE, MCZ 26382; United States: Pennsylvania [Harris no. 753]; *Apoda biguttata* (Packard); Two additional Harris specimens may be syntypes.

**cinereum** Forbes, 1942: 389, **Palacophobetron**; HOLOTYPE male, MCZ 26268; Panama: Canal Zone, Barro Colorado Island, 31 December 1934, [A. Friedman]; Label states collector was A. Friedman, not M. Bates as stated by Forbes.

**ephippiatus** Harris, 1869: 301, pl. 1, fig. 7, pl. II, fig. 10, **Limacodes**; SYNTYPES (2 males, 2 females, 3 pupal cases), MCZ 33259; United States; "probably from Pennsylvania", T. Hill [Harris no. 775]; *Achardia stimulea* (Clemens) (see Becker and Miller, 1989).

**ferruginea** Packard, 1864c: 338, **Euclea**; HOLOTYPE female, MCZ 16027; United States: "St. Catharines, C. W. (Coll. Scudder)"; *Euclea delphinii* (Boisduval); Specimen is a female, not a male as stated by Packard.

**geminata** Packard, 1864c: 343, **Cyrtosia**; SYNTYPE male, MCZ 16031; United States: Maryland, Janesville, R. Stratton; *Packardia geminata* (Packard); Packard (1964) and Tietz ([1952]: 151) record syntype(s) from Philadelphia in ANSP.

**monitor** Packard, 1864c: 337, **Euclea**; SYNTYPES (2 males), MCZ 16029; United States: Massachusetts, Cambridge and Boston; *Euclea delphinii* (Boisduval); Additional 2 male, 2 female syntypes in Harris Collection.

**testacea** Packard, 1864c: 348, **Tortricidia**; SYNTYPES (2), MCZ 26384; United States: [Harris no. 315].

**y-inversa** Packard, 1864c: 341, **Limacodes**; HOLOTYPE, MCZ 26383; United States: Pennsylvania [Harris no. 781]; *Apoda y-inversa* (Packard); A pseudotype in main collection, MCZ 16030.

## Family Megalopygidae

**crispata** Packard, 1864c: 335, **Lagoa**; SYNTYPES (1 male, 1 female), MCZ 27315; United States: Massachusetts, Brookline, C. A. Shurtleff; *Megalopyge crispata* (Packard); Packard notes "thirteen specimens reared from the blackberry bush by Mr. Shurtleff."

**immaculata** Cassino, 1928: 91, **Lagoa**; HOLOTYPE male, MCZ 32865; United States: Texas, Davis Mountains, 1-7 February 1926, O. C. Poling; *Megalopyge immaculata* (Cassino); Probably a synonym of *Megalopyge laycei* (Barnes and McDunnough).

**pulla** Forbes, 1942: 401, **Trosia**; HOLOTYPE female, MCZ 26269; Panama: Canal Zone, Barro Colorado Island, 10 October 1934, M. Bates.

## SUPERFAMILY PYRALOIDEA

## Family Pyralidae

**albiplagiata** Packard, 1873b: 269, **Myelois**; SYNTYPES (2 males of 2), MCZ 14291; United States: New Hampshire, May and June, C. A. Walker; *Pima albiplagiata* (Packard).

**anticostalis** Grote, 1871: 104, **Botys**; SYNTYPES (1 male, 1 female), MCZ 14263; United States: Alabama, "about Demopolis"; *Eulepte anticostalis* (Grote).

**argillaceellus** Packard, 1867: 54, **Crambus**; SYNTYPES (2), MCZ 14295; Canada: Labrador, Square Island, 14 July 1864; *Raphiptera argillaceella* (Packard).

**betulella** Hulst, 1890: 125, **Aerobasis**; PARALECTOTYPE female, MCZ 14284; United States: New York, July; Lectotype in AMNH designated by Neunzig (1986: 59).

**borealis** Packard, 1867: 53, **Pyrausta**; HOLOTYPE female, MCZ 14270; Canada: Labrador, Square Island, 14 July [1864]; *Pyrausta subsequalis borealis* Packard.

**caeculalis** Zeller, 1875: 333, pl. 10: fig. 46, **Perispasta**; HOLOTYPE male, MCZ 14259; United States: Texas, Dallas, Boll.

**californicalis** Packard, 1873a: 264, **Fromene**; LECTOTYPE male, MCZ 14297; United States: California, H. Edwards; *Euchromius californicalis* (Packard); Capps (1966: 5) saw two of the three males now in the collection, and designated one of the two as lectotype, without so labelling it. Since there are three specimens, not two, it is not clear which one is the lectotype. One of the three may not be a syntype because it was collected by Behrens, not Edwards.

- carpenterellus* Packard, 1874: 548, fig. 1. **Crambus**; SYNTYPES (4 of 5), MCZ 14299; United States: Colorado, "Mountains of Colorado", 19 July, 12 August, and 8 September 1873, W. L. Carpenter; *Crambus hamellus carpenterellus* Packard; Brown (1972: 247) restricted the type locality to Weston Pass, Park County, Colorado.
- comptoniella* Hulst, 1890: 125, **Acrobasis**; LECTOTYPE male, MCZ 14283; United States: New York, Long Island, July; Lectotype designated by Neunzig (1986: 56).
- consobrinella* Zeller, 1872: 548, **Nephopteryx**; HOLOTYPE male, MCZ 14287; United States: Texas, Dallas, Boll; *Glyptocera consobrinella* (Zeller).
- cuprina* Zeller, 1872: 497, **Aglossa**; SYNTYPES (1 male, 1 female), MCZ 14257; United States: Texas, Dallas, Boll.
- decimerella* Hulst, 1888: 117, **Lipographis**; Probable SYNTYPE female, MCZ 14288; United States: Texas, Blanco County, August; *Stylopalpia scobiella* (Grote).
- edmandsii* Packard, 1864b: 120, **Nephopteryx**; SYNTYPE, MCZ 14278; United States: Massachusetts; *Vitula edmandsii* (Packard).
- electella* Hulst, 1857: 137, **Anerastia**; Probable SYNTYPE, MCZ 14279; United States: Texas, Blanco County; *Homocosoma electella* (Hulst).
- fenestrella* Packard, 1873a: 259, **Pempelia**; SYNTYPES (2 of 6), MCZ 14292; United States: California, H. Edwards; *Lipographis fenestrella* (Packard); Edwards number 711 indicates Angel Island, April.
- feriella* Hulst, 1888: 115, **Tacoma**; Probable SYNTYPE, MCZ 14286; United States: Texas, [Blanco County, August].
- feudalis* Grote, 1875: 231, **Botis**; SYNTYPE, MCZ 16095; United States: New York and Massachusetts; *Herpetogramma thesusalis* (Walker).
- frigidella* Packard, 1867: 53, **Endorea**; SYNTYPE, MCZ 14296; Canada: Labrador, Caribou Island; *Pyla fusca* (Haworth); Abdomen missing.
- fulminalis* Zeller, 1872: 560, fig. 19, **Melissoblyptus**; HOLOTYPE male, MCZ 14276; United States: Texas, Dallas, Boll; *Paralipsa fulminalis* (Zeller).
- glacialis* Packard, 1867: 52, **Botys**; HOLOTYPE female, MCZ 15354; Canada: Labrador, Hopedale, 3 August 1864, *Udea inquinatalis* (Zeller); Packard (1867) indicates one sex only and no range of size.
- hospitella* Zeller, 1875: 338, **Ephestia**; PARALECTOTYPES (6), MCZ 14277; United States: Texas, Dallas, Boll; *Eurythmia hospitella* (Zeller); Lectotype in BMNH designated by Heinrich (1956: 307).
- integra* Zeller, 1873: 328, fig. 44, **Scoptonoma**; SYNTYPES (3), MCZ 16094; United States: Texas, Dallas, Boll; *Linodes integra* (Zeller); Although labelled as types by Hagen, these specimens were probably not seen by Zeller, who described the species from "Ein paar in meiner Sammlung, mehrere nach Hagens Angabe im Cambridger Museum."
- interrupta* Zeller, 1873: 329, **Scoptonoma**; SYNTYPES (4), MCZ 16093; United States: Texas, Dallas, Boll; *Lineodes interrupta* (Zeller); As with *Scoptonoma integra* above, Zeller probably did not see these specimens.
- latifasciatella* Packard, 1873b: 269, **Nephopteryx**; HOLOTYPE female, MCZ 14290; United States: Maine, A. S. Packard; *Teletthusia ovalis* (Packard).
- leoninella* Packard, 1873a: 259, **Pempelia**; SYNTYPES (2 of 3), MCZ 14293; United States: California, H. Edwards; *Lipographis leoninella* (Packard); Edwards number 706 indicates San Mateo County, pastures, May.
- lentifualis* Zeller, 1872: 525, **Homophysa**; SYNTYPE, MCZ 14274; United States: Texas, Dallas, Boll; *Aethiophysa lentifualis* (Zeller).
- melanogrammos* Zeller, 1872: 546, fig. 24, **Tetralopha**; HOLOTYPE male, MCZ 14256; United States: Texas, Dallas, Boll; Specimen illustrated by Holland and Schaus (1925: 65).
- metalliferalis* Packard, 1873a: 265, **Calaclysta**; SYNTYPES (2 of 4), MCZ 33257; United States: California, H. Edwards; *Dicymolomia metalliferalis* (Packard); Edwards number 208 indicates San Mateo County, marshy places, May.
- mustelinalis* Packard, 1873a: 262, **Botys**; SYNTYPES (2 of 2), MCZ 14269; United States: California, H. Edwards; *Mecyna mustelinalis* (Packard); One specimen has Edwards number 773 indicating Angel Island, May.
- occidentalis* Packard, 1873a: 260, **Scopula**; LECTOTYPE female, MCZ 14264; United States: California, H. Edwards; *Achyra occidentalis* (Packard); Lectotype designated by Capps (1967: 51). Edwards number 716 indicates Point Lobos, pastures, May.
- ochrifrontella* Zeller, 1875: 337, **Ephestia**; HOLOTYPE male, MCZ 14280; United States: Texas, Dallas, Boll; *Eulogia ochrifrontella* (Zeller).
- oetonalis* Zeller, 1873: 211, **Orobena**; HOLOTYPE male, MCZ 14273; United States: Texas, Dallas, Boll; "*Lygropia*" *oetonalis* (Zeller) (needs new genus according to Munroe, pers. comm.).
- ovalis* Packard, 1873b: 269, **Pempelia**; HOLOTYPE, MCZ 14289; United States: Maine, A. S. Packard; *Teletthusia ovalis* (Packard); Missing abdomen.

- perrubralis** Packard, 1873a: 264, **Botys**; SYNTYPES (2 of 3), MCZ 14267; United States: California; *Pyrausta perrubralis* (Packard).
- plumbicostalis** Grote, 1871: 103, **Botys**; HOLOTYPE male, MCZ 32943; United States: Alabama, "about Demopolis"; *Lygropia plumbicostalis* (Grote); Prothorax, left forewing, and right wings only.
- profundalis** Packard, 1873a: 261, **Botys**; SYNTYPES (2 of 5), MCZ 14271; United States: California, H. Edwards; *Udea profundalis* (Packard); Edwards number 705 indicates San Mateo County, pastures, May.
- reniculalis** Zeller, 1872: 526, **Homophysa**; SYNTYPE male, MCZ 14261; United States: Texas, Dallas, Boll; *Nephrogramma reniculalis* (Zeller).
- roseatella** Packard, 1873b: 270, **Nephoptyx**; LECTOTYPE male, MCZ 14282; United States: Massachusetts, Dorchester, F. G. Sanborn; *Peoria approximella* (Walker); Lectotype, and paralectotype also in MCZ, designated by Shaffer (1968: 30).
- rubrifasciella** Packard, 1873b: 267, **Acrobasis**; SYNTYPES (4 of 15), MCZ 14285; United States: Maine, Orono, A. S. Packard; See Neunzig (1986: 57) for discussion of identity of types.
- semirubralis** Packard, 1873a: 263, **Botys**; HOLOTYPE male, MCZ 14268; United States: California, [Sausalito, 6 May 1872], H. Edwards, *Pyrausta semirubralis* (Packard); A second male from "S. Nevada" (Sierra Nevada Mountains of California) is also labelled "type" in Packard's handwriting, but is probably not the holotype, since there are other specimens in the MCZ with the same data but without type labels.
- serratissimalis** Zeller, 1872: 521, **Crociodophora**; PARALECTOTYPE female, MCZ 14262; United States: Texas, Dallas, Boll; Lectotype in BMNH designated by Monroe (1976: 22).
- sesquialteralis** Zeller, 1873: 209, fig. 5, **Botis**; HOLOTYPE male, MCZ 32924; United States: Texas, Dallas, Boll; *Microtheoris o. ophionalis* (Walker).
- sincera** Zeller, 1875: 332, **Ocetoperia**; SYNTYPES (2 of 2), MCZ 14258; United States: Texas, Dallas, Boll; *Salobrena sincera* (Zeller).
- subdivisalis** Grote, 1871: 126, **Desmia**; HOLOTYPE [?], MCZ 14260; United States: Alabama, "about Demopolis"; Specimen consists of right wings only.
- sublivalis** Packard, 1873a: 261, **Botys**; SYNTYPES (2), MCZ 14266; United States: Maine, Brunswick, in grass uplands, and Orono, Maine, A. S. Packard, Jr.; *Pyrausta unifascialis sublivalis* (Packard).
- tetradella** Zeller, 1872: 552, **Anerastia**; PARALECTOTYPES (2), MCZ 14281; United States: Texas, Dallas, Boll; *Peoria tetradella* (Zeller); Lectotype in BMNH designated by Shaffer (1968: 17).
- unifascialis** Packard, 1873a: 261, **Botys**; SYNTYPES (2 of 2), MCZ 14265; United States: California, H. Edwards; *Pyrausta unifascialis* (Packard); Klots (1942: 422) designated a lectotype and paralectotype in AMNH. However, the MCZ specimens are probably the real types, since Packard kept the other types of California Pyralidae from Edwards. Beutenmueller (1892: 196) listed one type in AMNH.
- unistriatellus** Packard, 1867: 54, **Crambus**; SYNTYPE male, MCZ 22641; Canada: Labrador, Caribou Island.
- vibicalis** Zeller, 1873: 208, fig. 4, **Botis**; HOLOTYPE male, MCZ 14272; United States: Texas, Dallas, Boll; *Microtheoris vibicalis* (Zeller) (see Munroe, 1972: 147, about misspelling of name as *ribicalis*).

## Family Thyrididae

**dimidiata** Forbes, 1942: 345, **Rhodoneura**; HOLOTYPE female, MCZ 26263; Panama: Barro Colorado Island, 2-XII-1934, M. Bates; Missing abdomen.

**longalis** Forbes, 1942: 340, **Dysodia**; HOLOTYPE male, MCZ 26264; Panama: Barro Colorado Island, 29-XI-1934, M. Bates.

**maculata** Harris 1839: 313, **Thyris**; SYNTYPES (4), MCZ 26346; United States: [New Hampshire, Harris no. 219]; All missing abdomens.

**mesogramma** Forbes, 1942: 341, **Ochrothyris**; HOLOTYPE male, MCZ 26265; Panama: Barro Colorado Island, 10-I-1935, A. Friedman.

## SUPERFAMILY PTEROPHOROIDEA

### Family Pterophoridae

**cervinidactylus** Packard, 1873a: 266, **Pterophorus**; HOLOTYPE, MCZ 1785; United States: California, H. Edwards; *Platyptilia pallidactyla* (Haworth); Missing right wings and abdomen.

**cineraceus** Fish, 1881: 73, **Oidaematophorus**; SYNTYPE male, MCZ 1781; United States: Washington Territory, H. K. Morrison; Barnes and Lindsey (1921: 392) consider this specimen a paratype.

**grandis** Fish, 1881: 141, **Lioptilus**; "LECTOTYPE" male, MCZ 1782; United States: California; *Oidaematophorus grandis* (Fish); Cashatt (1972: 5) designated this specimen as lectotype, unaware of a previous lectotype designation by Klots (1942: 423) of a female in the AMNH.

**lacteodactylus** Chambers, 1873: 72, **Pterophorus**; HOLOTYPE male, MCZ 1783; United States: Kentucky, Chambers; *Oidaematophorus lacteodactylus* (Chambers); Missing abdomen.

**paleaceus** Zeller, 1873: 326, **Lioptilus**; SYNTYPES

(3), MCZ 1787; United States: Texas, Dallas, Boll; *Oidaematophorus paleaceus* (Zeller).

*pergracilidactylus* Packard, 1873a: 265. **Pterophorus**; HOLOTYPE, MCZ 1786; United States: California. H. Edwards; *Enmielina monodactyla* (Linnaeus); Missing left wings and abdomen.

*pumilio* Zeller, 1873: 324. **Mimesoptilus**; HOLOTYPE male, MCZ 1788; United States: Texas, Dallas, Boll; *Marasmarcha pumilio* (Zeller).

*semicostatus* Zeller, 1873: 323. **Mimescoptilus**; SYNTYPES (2 of 2), MCZ 1789; United States: Texas, Dallas, Boll; *Stenoptilia zophodactyla* (Duponchiel); One male and one female, although Zeller stated two males.

*sulphureodactylus* Packard, 1873a: 266. **Pterophorus**; SYNTYPES (6 of 8), MCZ 1784; United States: California, Siskiyou County, Goose Lake, 26–27 July, J. Holleman; *Oidaematophorus sulphureodactylus* (Packard).

## APPENDIX

Chambers "types" in the British Museum (Natural History)

The collection of the BMNH contains specimens sent by Chambers to Stainton in the 1870s. Some of them probably are syntypes of Chambers' species, others are not syntypes but are topotypes, and others are taxa described by other authors. The topotypes might prove useful to document Chambers' species concepts, or as neotype candidates.

There are three lots of Chambers specimens now in the Stainton collection. The August 1877 shipment to Stainton was accompanied by the following letter from Chambers:

"Wishing to preserve types of species of Tineina described by me, and likewise to make some acknowledgement . . . it has been my intention to send you as complete a collection of the species of this region [Covington, Kentucky] as I could make. Unfortunately during my absence in Colorado more than half the collection that I had made before I went there was destroyed, and the remainder with a small collection that I made in Colorado, was sent to the . . . [MCZ]. This spring and summer I have attempted to supply a few cabinets in this country and your own. Un-

fortunately the continued ill-health of my son again calls me to Colorado and unwilling to risk the destruction of my collection while I am absent I distribute it — so far as I have renewed it — now. I enclose here with 67 species of Tineina and one of Tortricina."

The specimens are listed here as identified by Chambers. We have made no attempt to verify identifications. The localities listed here are those indicated by Chambers in correspondence or on labels, and are not necessarily the type localities. The first lot, sent December 1876, includes *Lithariapteryx abroniaeella* Chamber "from Colorado where the larva mines the leaves of *Abronia fragrans* up to an altitude of about 7,000 feet above sea level" and *Batrachedra praeangusta* Chambers from Colorado.

The second lot, sent in January 1877, now includes 5 species, but originally included 6.

1. *Lithariapteryx abroniaeella* Chambers Colorado
2. *Lithocolletis salicifoliella* Chambers
3. *Lithocolletis amphicarpeaeella* Chambers Kentucky
4. *Laverna magnatella* Chambers = *Laverna oenotheriella* Chambers
5. *Gracilaria* [sic] *salicifoliella* Chambers
6. *Eurynome albella* Chambers Colorado [must have been damaged in transit, not at BMNH]

The largest lot was sent in August 1877. All bear Chambers' handwritten numbers and Stainton's name labels. The numbers not cited in the following list refer to species described by authors other than Chambers.

1. *Xylesthia clemensella* Chambers Kentucky
2. *Tinea bimaculella* Chambers Kentucky
3. *Tinea caemetariella* [sic] Chambers Kentucky
5. *Semele cristatella* Chambers Kentucky

6. *Agnippe bicolorella* Chambers Kentucky
7. *Hyponomeuta longimaculella* Chambers Kentucky
8. *Depressaria eupatoriella* Chambers Kentucky
9. *Gelechia querciella* Chambers Kentucky
10. *Gelechia cristatella* Chambers Kentucky
11. *Gelechia rubensella* Chambers Kentucky
13. *Helice pallidochrella* Chambers Kentucky
17. *Argyresthia undulatella* Chambers Kentucky
18. *Gracilaria packardella* [sic] Chambers Kentucky
19. *Corisium albanotella* Chambers Kentucky
20. *Gracilaria* [sic] *fasciella* Chambers Kentucky
21. *Gracilaria* [sic] *purpuriella* Chambers Kentucky
23. *Coleophora ochrella* Chambers Kentucky
24. *Coleophora caryaefoliella* Chambers Kentucky
25. *Laverna cephalanthiella* Chambers Kentucky
26. *Chrysopelia purpuriella* Chambers Kentucky
27. *Laverna*? *gleditschiaeella* Chambers Kentucky
28. *Perimede erransella* Chambers Kentucky
30. *Dryope murtfeldtella* Chambers Kentucky
31. *Tischeria quercivorella* Chambers Kentucky
32. *Tischeria heliopsisella* Chambers Kentucky
33. *Bucculatrix luteella* Chambers Kentucky
35. *Philonome clemensella* Chambers Kentucky
36. *Phyllocnistis vitifoliella* Chambers Kentucky
37. *Phyllocnistis ampelopsiella* Chambers Kentucky
40. *Leucanthiza amphicarpeaefoliella* Chambers Kentucky
41. *Lithocolletis clemensella* Chambers Kentucky
43. *Lithocolletis fuscocostella* Chambers Kentucky
44. *Lithocolletis celtisella* Chambers Kentucky
45. *Lithocolletis cincinnatiella* Chambers Kentucky
47. *Lithocolletis ulmella* Chambers Kentucky
49. *Lithocolletis tiliaeella* Chambers Kentucky
50. *Lithocolletis ornatella* Chambers Kentucky
51. *Lithocolletis corylisella* Chambers Kentucky
52. *Lithocolletis ambrosiaeella* Chambers Kentucky
53. *Polyhymno sexstrigella* Chambers Texas
54. *Perimede unomaculella* Chambers Texas
55. *Elachista parvipulvella* Chambers Texas
58. *Ornix prunivorella* Chambers Kentucky
59. *Gelechia fuscoochrella* Chambers Kentucky
60. *Lithocolletis tritaeniaella* Chambers Kentucky
61. *Nepticula apicialbella* Chambers Kentucky
63. *Gracilaria 12-lineella* Chambers Kentucky
64. *Gelechia bimaculella* Chambers Kentucky
65. *Lithocolletis corylisella* Chambers Kentucky
66. *Gelechia variella* [sic] Chambers Kentucky
68. *Microaethia amphicarpeacana* Chambers Kentucky

The correspondence also indicates a shipment in November 1872 which included 41 Chambers species. However, these specimens could not be located at the BMNH.

## LITERATURE CITED

- ADAMSKI, D., AND T. M. PETERS. 1956. Review of Nearctic *Apotomis* Huebner (Lepidoptera: Tortricidae: Olethreutini). *Canadian Entomologist*, **118**: 649-689.
- BECKER, V. O., AND S. E. MILLER. 1989. The identity of *Sphinx brunnus* Cramer and the taxonomic position of *Acharia* Huebner (Lepidoptera: Limacodidae). *Journal of Research on the Lepidoptera* **26**: 219-224.
- BEUTENMUELLER, W. 1889. Chambers' corrections to his paper on the illustrations of the neuration of the wings of American Tineidae. *Entomologica Americana*, **5**: 37-38.
- . 1892. List of types of Lepidoptera in the Edwards collection of insects. *Bulletin of the American Museum of Natural History*, **4**: 167-195.
- BRAUN, A. F. 1945. Elachistidae of North America (Microlepidoptera). *Memoirs of the American Entomological Society*, **13**: 110 + ii pp., pl. I-XXVI.
- . 1963. The genus *Bucculatrix* in America north of Mexico (Microlepidoptera). *Memoirs of the American Entomological Society*, **18**: iii + 205 + ii pp., pl. I-XLV.
- . 1972. Tischeriidae of America north of Mexico (Microlepidoptera). *Memoirs of the American Entomological Society*, **28**: i + 148 pp.
- BROWN, F. M. 1972. The type locality for two moths (Pyralididae [sic], Saturniidae) collected by Lt. W. L. Carpenter, U.S.A., in Colorado, 1873. *Journal of the Lepidopterists' Society*, **26**: 245-247.
- BROWN, R. L. 1957. Resurrection of *Catastega* Clemens and revision of the *Epinotia vertumnana* (Zeller) species-group (Tortricidae: Olethreutinae). *Journal of the Lepidopterists' Society*, **40**: 327-346. ["1986"]
- BUSCK, A. 1903. A revision of the American moths of the family Gelechiidae, with descriptions of new species. *Proceedings of the United States National Museum*, **25**: 767-938.
- CAPPS, H. W. 1966. Review of New World moths of the genus *Euchromius* Guenée with descriptions of two new species (Lepidoptera: Crambidae). *Proceedings of the United States National Museum*, **119**(3551): 1-9.
- . 1967. Review of some species of *Loxostege* Huebner and descriptions of new species (Lepidoptera, Pyraustidae: Pyraustinae). *Proceedings of the United States National Museum*, **120**(3561): 1-75.
- CASHATT, E. D. 1972. Notes on the *balanotes* (Meyrick) group of *Oidaematophorus* Wallengren with description of a new species (Pterophoridae). *Journal of the Lepidopterists' Society*, **26**: 1-13.
- CASSINO, S. F. 1925. Some new Lasiocampidae. *The Lepidopterist*, **4**: 89-96.
- CHAMBERS, V. T. 1870a. A singular case. *Canadian Entomologist*, **2**: 43-44. [saturniid larvae and their parasites]
- . 1870b. Harmless parasites on the larva of the luna moth. *American Entomologist*, **2**: 125.
- . 1870c. Time of the appearance of the polyphemus moth in Louisiana and Kentucky. *American Entomologist*, **2**: 156.
- . 1870d. An anomalous grape sphinx moth. *American Entomologist*, **2**: 210.
- . 1870e. A rare capture. *American Entomologist*, **2**: 242. [on *Phymaphora pulchella*]
- . 1870f. Salt marsh caterpillar. *American Entomologist*, 336.
- . 1871a. A new species of *Cemiostoma* (Micro-Lepidoptera, Tineina). *Canadian Entomologist*, **3**: 23-25.
- . 1871b. Micro-Lepidoptera. *Canadian Entomologist*, **3**: 54-58, 84-88, 108-112, 127-130, 146-149, 161-166, 182-185, 205-209, 221-224.
- . 1872a. Micro-Lepidoptera. *Canadian Entomologist*, **4**: 7-12, 25-29, 41-44, 65-69, 88-92, 106-108, 126-133, 146-150, 169-175, 191-195, 206-209, 222-226.
- . 1872b. Microlepidoptera. *American Naturalist*, **6**: 432-433. [notes on how to collect]
- . 1872c. Notes on *Cemiostoma*. *American Naturalist*, **6**: 489-490.
- . 1873a. Micro-Lepidoptera. *Canadian Entomologist*, **5**: 12-15, 44-50, 72-75, 85-91, 110-115, 124-128, 147-152, 173-176, 185-190, 229-232.
- . 1873b. *Cemiostoma* again. *American Naturalist*, **7**: 47-49.
- . 1874a. Micro-Lepidoptera. *Canadian Entomologist*, **6**: 8-11, 49-52, 72-77, 96-97, 128-130, 149-153, 166-170, 197-198, 217-220.
- . 1874b. Tineina from Texas. *Canadian Entomologist*, **6**: 229-249.
- . 1874c. Prof. Frey, of Zürich, and some American Teneina [sic]. *Cincinnati Quarterly Journal of Science*, **1**: 193-211.
- . 1874d. Notes and errata on a former paper, by V.T. Chambers, on Prof. Frey, and some American Teneina [sic]. *Cincinnati Quarterly Journal of Science*, **1**: 338-340.
- . 1875a. Tineina of the Central United States. *Cincinnati Quarterly Journal of Science*, **2**: 97-121.
- . 1875b. Teneina [sic] of the United States. *Cincinnati Quarterly Journal of Science*, **2**: 226-259.
- . 1875c. Teneina [sic] of Colorado. *Cincinnati Quarterly Journal of Science*, **2**: 289-305.
- . 1875d. Tineina from Texas. *Canadian Entomologist*, **7**: 7-12, 30-35, 51-56, 73-75, 92-95, 105-108.
- . 1875e. Tineina from Canada. *Canadian Entomologist*, **7**: 124-128, 144-147, 209-213.
- . 1875f. On some European 'micros' away from home. *Entomologist's Monthly Magazine*, **11**: 279-280.



- . 1876a. Micro-Lepidoptera. Canadian Entomologist, **8**: 18-19.
- . 1876b. Tineina. Canadian Entomologist, **8**: 30-35, 103-106, 135-138, 158-160, 171-173, 217-220.
- . 1876c. Correspondence [sic]. Canadian Entomologist, **8**: 39-40. [on denuding wings of Lepidoptera]
- . 1877a. Tineina. Canadian Entomologist, **9**: 13-15, 108-110, 123-127, 145-147, 194-196, 206-208.
- . 1877b. Tineina from Texas. Canadian Entomologist, **9**: 22-26, 71-74.
- . 1877c. Correspondence. Canadian Entomologist, **9**: 38-40.
- . 1877d. The Tineina of Colorado. Bulletin of the United States Geological and Geographical Survey of the Territories, **3**: 121-142.
- . 1877e. Notes on a collection of tineid moths made in Colorado in 1875 by A. S. Packard, Jr., M. D. Bulletin of the United States Geological and Geographical Survey of the Territories, **3**: 143-145.
- . 1877f. On the distribution of Tineina in Colorado. Bulletin of the United States Geological and Geographical Survey of the Territories, **3**: 147-150.
- . 1877g. Insects feeding on *Gleditschia*. Canadian Entomologist, **9**: 231-235.
- . 1877h. Notes upon the American species of *Lithocolletis*. Psyche, **2**: 81-87.
- . 1878a. Tineina. Canadian Entomologist, **10**: 50-54.
- . 1878b. Micro-lepidoptera. Canadian Entomologist, **10**: 74-78, 109-114, 238-239.
- . 1878c. Descriptions of new Tineina from Texas, and others from more northern localities. Bulletin of the United States Geological and Geographical Survey of the Territories, **4**: 79-106.
- . 1878d. Index to the described Tineina of the United States and Canada. Bulletin of the United States Geological and Geographical Survey of the Territories, **4**: 125-167.
- . 1878e. On *Pronuba yuccasella* (Riley), and the habits of some Tineina. Journal of the Cincinnati Society of Natural History, **1**: 141-154.
- . 1878f. Tineina and their food-plants. Bulletin of the United States Geological and Geographical Survey of the Territories, **4**: 107-123.
- . 1878g. On larvae of Tineina, especially of *Lithocolletis*. Psyche, **2**: 137-153.
- . 1879a. Micro-lepidoptera. Canadian Entomologist, **11**: 5-10, 72-75, 89-93, 118-119, 125-127.
- . 1879b. Tineina. Canadian Entomologist, **11**: 143-146.
- . 1879c. Annual address of V. T. Chambers, Esq., President Cincinnati Society of Natural History. Journal of the Cincinnati Society of Natural History, **2**: 71-92, 1 pl.
- . 1879d. [corrections to Chambers, 1878g]. Psyche, **2**: 227.
- . 1880a. Some new species of Tineina from North America. Canadian Entomologist, **12**: 225-226.
- . 1880b. Descriptions of some new Tineina, with notes on a few old species. Journal of the Cincinnati Society of Natural History, **2**: 179-194.
- . 1880c. Illustrations of the neuration of the wings of American Tineina. Journal of the Cincinnati Society of Natural History, **2**: 194-199, 4 pls.
- . 1880d. On the changes that take place in the mouth-parts and legs of some leaf-mining lepidopterous larvae. American Entomologist, **3**: 255-262.
- . 1880e. Notes upon some tineid larvae. Psyche, **3**: 63-68.
- . 1880f. Further notes on some tineid larvae. Psyche, **3**: 135-137, 147-149.
- . 1880g. Wandering habit of larvae belonging to the genus *Bucculatrix*. American Entomologist, **3**: 50.
- . 1880h. Insects injuring the black locust (*Robinia pseudacacia*). American Entomologist, **3**: 59-61.
- . 1880i. *Pronuba* vs. *Prodoxus*. American Entomologist, **3**: 177.
- . 1881a. On the early stages of *Gracilaria* [sic] *stigmatella*, Fabr. Canadian Entomologist, **13**: 25-28.
- . 1881b. On the larva of *Mordella*. Canadian Entomologist, **13**: 173-175.
- . 1881c. On some North American Tineidae, by Thomas, Lord Walsingham, F.Z.S. Canadian Entomologist, **13**: 191-194.
- . 1881d. New species of Tineina. Journal of the Cincinnati Society of Natural History, **3**: 289-296.
- . 1881e. *Nepticula pteliacella*, n.sp. Psyche, **3**: 276.
- . 1882a. Notes on the larva of *Bucculatrix ambrosiaefoliella*. Canadian Entomologist, **14**: 153-160.
- . 1882b. Burrowing larvae. Nature, **25**: 529.
- . 1882c. "Tineidae" or "Tineina." Papilio, **2**: 115-119.
- . 1882d. On the antennae and trophi of Lepidopterous larvae. Journal of the Cincinnati Society of Natural History, **5**: 5-24.
- . 1883. The classification of the Tineidae. Psyche, **4**: 71-74.
- COMISTOCK, J. H. 1880. Report of the entomologist. pp. 185-348 In Annual Report of the United States Commissioner of Agriculture for 1879. Washington, D.C. [not seen]
- DAVIS, D. R. 1967. A revision of the moths of the subfamily Prodoxinae (Lepidoptera: Incurvariidae). Bulletin of the United States National Museum, **255**: 1-170.
- . 1978. A revision of the North American moths of the Superfamily Eriocraniioidea with the proposal of a new family, Acanthopterocte-

- tidae (Lepidoptera). *Smithsonian Contributions to Zoology*, **251**: 1-131.
- DIETZ, W. G. 1900a. On *Pigritia* Clem. Transactions of the American Entomological Society, **27**: 100-120, pls. 6-7.
- . 1900b. Some new genera and species of *N. A. Tineina*. *Entomological News*, **11**: 349-354, 1 pl.
- . 1905. Revision of the genera and species of the tineid subfamilies Amydriinae and Tineinae inhabiting North America. Transactions of the American Entomological Society, **31**: 1-95.
- . 1910. Revision of the Blastobasidae of North America. Transactions of the American Entomological Society, **36**: 1-72, pls. 1-4.
- DUCKWORTH, W. D., AND T. D. EICHLIN. 1978. The type-material of North American clearwing moths (Lepidoptera: Sesiiidae). *Smithsonian Contributions to Zoology*, **148**: 1-34.
- EDWARDS, H. 1880. Descriptions of some new forms of Aegeridae. *Bulletin of the Brooklyn Entomological Society*, **3**: 71-72.
- . 1881. New genera and species of the Family Aegeridae. *Papilio*, **1**: 179-208, pl. IV.
- ESSIG, E. O. 1941. Itinerary of Lord Walsingham in California and Oregon, 1871-1872. *Pan-Pacific Entomologist*, **17**: 97-113.
- EVENHUIS, N. L. 1982. Catalog of the primary types of Bombyliidae (Diptera) in the entomological collections of the Museum of Comparative Zoology, with designations of lectotypes. *Breviora*, **169**: 1-23.
- FERNALD, C. H. 1878. Tortricidae. *Canadian Entomologist*, **10**: 81-84.
- . 1879. Tortricidae. *Canadian Entomologist*, **11**: 155-158.
- . 1882. Descriptions of new species of Tortricidae. Transactions of the American Entomologist Society, **10**: 65-72.
- FISU, C. 1881. Pterophoridae. *Canadian Entomologist*, **13**: 70-74, 140-143.
- FORBES, W. T. M. 1932. The *rubidella* group of *Aristotelia* (Lepidoptera, Gelechiidae). *Journal of the New York Entomological Society*, **40**: 423-432, pl. 20.
- . 1942. The Lepidoptera of Barro Colorado, Panama. No. 2. *Bulletin of the Museum of Comparative Zoology*, **90**: 265-406.
- FREY, H. AND J. BOLL. 1873. Nordamerikanische Tineen. *Stettiner Entomologische Zeitung*, **34**: 201-224.
- GEISER, S. W. 1929. Professor Jacob Boll and the natural history of the southwest. *American Midland Naturalist*, **11**: 435-452.
- . 1948. *Naturalists of the Frontier*. Southern Methodist University Press, Dallas, Texas. Second Edition. 296 pp.
- GROH, A. R. 1871. Descriptions of Lepidoptera from Alabama. *Canadian Entomologist*, **3**: 101-105, 121-126.
- . 1872. North American Pyralides. *Bulletin of the Buffalo Society of Natural History*, **2**: 229-232.
- GROTE, A. R., AND C. T. ROBINSON. 1868. Descriptions of American Lepidoptera.-No. 4. Transactions of the American Entomological Society, **2**: 179-206.
- HAGEN, H. A. 1884. The types of Tineina in the Collection of the Museum in Cambridge, Mass. *Papilio*, **4**: 96-98, 151-154.
- HARRIS, T. W. 1828. Insects. *New England Farmer*, **7**(5): 33-34.
- . 1830. Insects. *New England Farmer*, **9**(1): 1-2.
- . 1833. Insects, pp. 566-595. In E. Hitchcock. Report on the Geology, Mineralogy, Botany and Zoology of Massachusetts. J. S. and C. Adams, Amherst. xii + 700 pp.
- . 1835a. Insects, pp. 553-602. In E. Hitchcock. Report on the Geology, Mineralogy, Botany, and Zoology of Massachusetts. Second Edition. Commonwealth of Massachusetts, Amherst. xii + 702 pp.
- . 1835b. Insects, pp. 33-82. In E. Hitchcock. A catalogue of the Animals and Plants in Massachusetts. J. S., and C. Adams, Amherst. 142 pp. [reprinted from 1835a; may have been published in 1834]
- . 1839. Descriptive catalogue of North American insects, belonging to the Linnean genus *Sphinx* in the cabinet of Thaddeus William Harris. *American Journal of Science and Arts* (1), **36**: 282-320.
- . 1841. A Report on the Insects of Massachusetts, Injurious to Vegetation. Folsom, Wells, and Thurston, Cambridge. viii + 459 pp. [reprinted 1970 by Arno Press, New York.]
- . 1842. A Treatise on Some of the Insects of New England, which are Injurious to Vegetation. John Owen, Cambridge. 459 pp. [reprint, with slight changes, of Harris, 1841]
- . 1854. Report on some of the diseases and insects affecting trees and vines. Proceedings of the American Pomological Society Congress, **1854**: 197-217. [not seen]
- . 1869. Entomological correspondence. Occasional Papers of the Boston Society of Natural History, **1**: xlvii + 375 pp, pl. I-IV. [compiled and edited by S. H. Scudder]
- HEINRICH, C. 1923. Revision of the North American moths of the subfamily Eucosminae of the Family Olethreutidae. *Bulletin of the United States National Museum*, **123**: iv + 298 pp., 59 pl.
- . 1926. Revision of the North American moths of the subfamilies Laspeyresinae and Olethreutinae. *Bulletin of the United States National Museum*, **132**: v + 216 pp., 76 pl.
- HEPPNER, J. B. 1978. Transfers of some Nearctic genera and species of Glyphipterigidae (auctorum) to Oecophoridae, Copromorphidae, Plutellidae, and Tortricidae (Lepidoptera). *Pan-Pacific Entomologist*, **54**: 48-55.
- . 1981. Revision of the new genus *Diplos-*

- chizia* (Lepidoptera: Glyphipterigidae) for North America. Florida Entomologist, **64**: 309-336.
- . 1982. A world catalog of genera associated with the Glyphipterigidae Auctorum (Lepidoptera). Journal of the New York Entomological Society, **89**: 220-294. ("1981")
- . 1984. *Fabiola quinqueferella*: an obscure California moth formerly in Glyphipterigidae (Lepidoptera: Oecophoridae). Pan-Pacific Entomologist, **60**: 337-340.
- . 1985. Sedge Moths of North America (Lepidoptera: Glyphipterigidae). Flora and Fauna Publ., Gainesville, Florida.
- HODGES, R. W. 1961a. A review of the genus *Walshia* Clemens with descriptions of new species (Lepidoptera: Gelechioidea). Bulletin of the Brooklyn Entomological Society, **56**: 66-80.
- . 1961b. The genus *Ithome* in North America North of Mexico (Walshiidae). Journal of the Lepidopterists' Society, **15**: 81-90.
- . 1962a. A review of the genus *Periploca* with descriptions of nine new species (Lepidoptera: Gelechioidea). Pan-Pacific Entomologist, **38**: 83-97.
- . 1962b. The genus *Perimede* Chambers in North America North of Mexico (Lepidoptera: Walshidae). Proceedings of the Entomological Society of Washington, **64**: 145-154.
- . 1966. Revision of the Nearctic Gelechioidea, I The Lita group (Lepidoptera: Gelechioidea). Proceedings of the United States National Museum, **119**(35-47): 1-66, pl. 1-31.
- . 1974. Gelechioidea: Oecophoridae In R.B. Dominick, The moths of America North of Mexico, fasc. 6.2: x + 142 pp.
- . 1986. Gelechioidea: Gelechioidea (in part) In R. B. Dominick, et al., The moths of America north of Mexico, fasc. 7.1. xiii + 195 pp.
- HODGES, R. W., ET AL. 1983. Check list of the Lepidoptera of America North of Mexico. Wedge Entomological Research Foundation, xxiv + 284 pp.
- HOLLAND, W. J., AND W. SCHAU. 1925. The Epipaschiinae of the Western Hemisphere; a synonymic catalog of the species hitherto described, with figures of many, which have not heretofore been depicted. Annals of the Carnegie Museum, **16**: 49-131.
- HULST, G. D. 1887. New species of Pyralidae. Entomologica Americana, **3**: 129-138.
- . 1888. New genera and species of Epipaschiinae and Phycitidae. Entomologica Americana, **4**: 113-118.
- JOHNSON, C. W. 1925. Diptera of the Harris collection. Proceedings of the Boston Society of Natural History, **38**: 57-99.
- KEARFOTT, D. 1903. Descriptions of new Tineoidea. Journal of the New York Entomological Society, **11**: 145-165, pl. 9.
- . 1905. New tortricids. Canadian Entomologist, **37**: 9-11.
- . 1907a. New North American Tortricidae. Transactions of the American Entomological Society, **33**: 1-98.
- . 1907b. New Micro-Lepidoptera. Canadian Entomologist **39**: 1-9, 53-60, 77-84, 121-128, 153-160, 211-212.
- . 1907c. Microlepidoptera from the Black Mountain Region of North Carolina, with descriptions of new species. Bulletin of the American Museum of Natural History, **23**: 153-167, pl. viii.
- . 1908. New North American Tortricidae and Tineina. Journal of the New York Entomological Society, **16**: 167-188.
- KLOTS, B. 1942. Type material of North American Microlepidoptera other than Aegeriidae in the American Museum of Natural History. Bulletin of the American Museum of Natural History **79**: 391-424.
- McDUNNOUGH, J. 1944. Notes on Chambers' coleophorid types in the Museum of Comparative Zoology, Cambridge, Mass. Canadian Entomologist, **76**: 237-241.
- MILLER, W. E. 1967. Taxonomic review of the *Rhyacionia frustrana* group of pine-tip moths, with description of a new species (Olethreutidae). Canadian Entomologist, **99**: 590-596.
- . 1970. Fernald types of North American Olethreutinae (Lepidoptera: Tortricidae). Proceedings of the Entomological Society of Washington, **72**: 288-294.
- . 1976. Biology and taxonomy of three gall forming species of *Epiblema* (Olethreutidae). Journal of the Lepidopterists' Society, **30**: 50-58.
- . 1985. Nearctic *Olethreutes*: five new synonymies, two revised statuses, and notes (Lepidoptera: Tortricidae). Proceedings of the Entomological Society of Washington, **87**: 408-417.
- NEUNZIG, H. H. 1986. Pyraloidea: Pyralidae (in part) in R.B. Dominick et al., The moths of America north of Mexico, fascicle 15.2. xii + 113 pp.
- NEWTON, P. J. AND C. WILKINSON. 1982. A taxonomic revision of the North American species of *Stigmella* (Lepidoptera: Nepticulidae). Systematic Entomology, **7**: 367-463.
- PACKARD, A. S., JR. 1864a. Notes on the family Zygaenidae. Proceedings of the Essex Institute, **4**: 7-47.
- . 1864b. The humble bees of New England and their parasites; with notices of a new species of Anthophorabia, and a new genus of Proctotrupidae. Proceedings of the Essex Institute, **4**: 107-140.
- . 1864c. Synopsis of the Bombycidae of the United States. Part II. Proceedings of the Entomological Society of Philadelphia, **3**: 331-396.
- . 1867. View of the lepidopterous fauna of Labrador. Proceedings of the Boston Society of Natural History, **11**: 32-63.
- . 1869. Guide to the Study of Insects, and a Treatise on Those Injurious and Beneficial to

- Crops: for the Use of Colleges, Farm-schools, and Agriculturalists. Essex Institute Press, Salem, Mass. viii + 702 pp. 11 pl.
- . 1870. New or little known injurious insects. Report of the Massachusetts Board of Agriculture **17**: 235-251. [Also published as "Injurious Insects. New and Little Known," Wright and Potter, Printers, Boston 31 pp., 1 pl., 1870.]
- . 1871. First Annual Report on the Injurious and Beneficial Insects of Massachusetts. Wright and Potters Printers, Boston. 31 pp., 1 pl.
- . 1873a. Catalogue of the Pyralidae of California, with descriptions of new Californian Pterophoridae. *Annals of the Lyceum of Natural History of New York*, **10**: 257-267.
- . 1873b. Notes on some Pyralidae from New England, with remarks on the Labrador species of this family. *Annals of the Lyceum of Natural History of New York*, **10**: 267-271.
- . 1874. On the geographical distribution of the moths of Colorado. Annual Report of the United States Geological and Geographical Survey of the Territories: 543-560, 1 pl.
- POWELL, J. A. 1964. Biological and taxonomic studies on tortricine moths, with reference to the species in California. University of California Publications in Entomology, **32**: iv + 317 pp.
- . 1965. Host associations and taxonomy of Nearctic conifer cone moths in the genus *Eucosma* (Lepidoptera: Tortricidae). *Hilgardia*, **39**: 1-36.
- . 1973. A systematic monograph of New World ethmiid moths (Lepidoptera: Gelechioidea). *Smithsonian Contributions to Zoology*, **120**: iv + 302 pp.
- . 1985. Discovery of two new species and genera of shaggy tortricids related to *Synnoma* and *Niasoma* (Tortricidae: Sparganothini). *Journal of Research on the Lepidoptera*, **24**: 61-71.
- PUTBRINGTON, F. F. AND D. G. NIELSEN. 1987. Discovery of the T. W. Harris collection at Harvard University and designation of a lectotype for *Podosesia syringae* Harris (Lepidoptera: Sesiidae). *Proceedings of the Entomological Society of Washington*, **89**: 549-551.
- RIDOUT, B. V. 1977. Two new synonymies of Microlepidoptera (Gelechioidea: Gnorimoschemini and Oecophoridae: Depressariinae). *Entomologists Gazette*, **28**: 38-42.
- RILEY, C. V. 1857. Report of the Entomologist, pp. 459-592, pls. I-XI. in Report of the Commissioner of Agriculture, 1856. Washington, DC. 719 pp.
- . 1859. Two brilliant and interesting microlepidoptera new to our fauna. *Proceedings of the Entomological Society of Washington*, **1**: 155-159.
- RINDGE, F. H. 1955. The type material in the J. B. Smith and G. D. Hulst collections of Lepidoptera in the American Museum of Natural History. *Bulletin of the American Museum of Natural History*, **106**: 91-172.
- ROBINSON, G. S. 1986. Fungus moths: a review of the Scardiinae (Lepidoptera: Tineidae). *Bulletin of the British Museum (Natural History). Entomology*, **52**: 37-181.
- SATTLER, K. 1962. Ein Beitrag zur Geschichte der Mikrolepidopterozoen. *Entomologische Zeitschrift*, **72**(13): 1-3.
- . 1979. A taxonomic revision of the genus *Deltophora* Janse, 1950 (Lepidoptera: Gelechioidea). *Bulletin of the British Museum (Natural History). Entomology*, **38**: 263-322.
- SCODDER, S. H. 1883. The pine moth of Nantucket, *Retinia frustрана*. Publication of the Massachusetts Society for the Promotion of Agriculture. [not seen]
- SHAFFER, J. C. 1968. A revision of the Peoriinae and Anerastiinae (Auctorum) of America North of Mexico (Lepidoptera: Pyralidae). *Bulletin of the United States National Museum*, **280**: 1-124.
- THIETZ, H. M. [1952]. The Lepidoptera of Pennsylvania. Pennsylvania State College, State College, Penn. xii + 194 pp.
- WAGNER, D. L. 1988. Taxonomic status of *Korscheltella* Börner in North America (Lepidoptera: Hepialidae). *Journal of the New York Entomological Society* **96**: 345-354.
- WALSINGHAM, LORD. 1879. Illustrations of typical specimens of Lepidoptera Heterocera in the collection of the British Museum. Part IV. - North-American Tortricidae. *British Museum (Natural History)*, London. xi + 84 pp., pl. LXI-LXXVII.
- . 1881. On some North-American Tineidae. *Proceedings of the Zoological Society of London*, **1881**: 301-325, pl. XXXV, XXXVI.
- . 1882. Notes on Tineidae of North America. *Transactions of the American Entomological Society*, **10**: 165-204.
- . 1889. Steps toward a revision of Chambers' index, with notes and descriptions of new species. *Insect Life*, **2**: 23-26.
- WILKINSON, C. 1979. A taxonomic study of the micro-lepidopteran genera *Microcalyptis* Braun and *Fomoria* Beirne occurring in the United States of America (Lepidoptera, Nepticulidae). *Tijdschrift voor Entomologie*, **122**: 59-90.
- WILKINSON, C., AND M. J. SCOBLE. 1979. The Nepticulidae (Lepidoptera) of Canada. *Memoirs of the Entomological Society of Canada*, **107**: 1-129.
- ZELLER, P. C. 1872. Beitrage zur Kenntniss der nordamerikanischen Nachtfalter, besonders der Microlepidopteren. Erste Abtheilung. *Verhandlungen der Zoologisch-Botanischen Gesellschaft in Wien*, **22**: 447-566, pl. II-III.
- . 1873. Beitrage zur Kenntniss der nordamerikanischen Nachtfalter, besonders der Microlepidopteren. Zweite Abtheilung. *Verhandlungen der Zoologisch-Botanischen Gesellschaft in Wien*, **23**: 201-334, pl. III-IV.
- . 1875. Beitrage zur Kenntniss der nordamerikanischen Nachtfalter, besonders der Microlepidopteren. *Verhandlungen der Zoologisch-Botanischen Gesellschaft in Wien*, **25**: 207-360, pl. VIII-X.

## INDEX

Original names of all taxa cited are indexed, along with present names if the present species name differs (e.g., present names for which only the generic name differs from the original are not indexed). Family names and significant people cited in the introduction are also indexed.

- abroniaeella, Lithariapteryx, 67, 74  
 absconditella, Monochroa, 64  
 acapnopennella, Nemapogon, 52  
 Adamski, D., 56  
 aenea, Tischeria, 49  
 aesella, Heliozela, 50  
 agnella, Bucculatrix, 54  
 Agonoxenidae, 61  
 alba, Tegeticula, 50  
 albaciliaeella, Strobisia, 55  
 albalineella, Eriphia, 61  
 albanotella, Corisium, 75  
 albapennella, Butalis, 61  
 albella, Cemistoma, 54  
 albella, Eurynome, 54, 74  
 albella, Harpalyce, 55  
 albicapitella, Bucculatrix, 54  
 albilorella, Filatima, 66  
 albimarginella, Gelechia, 61  
 albiplagiata, Myeloides, 71  
 albisparsella, Gelechia, 63, 64  
 albiatrigella, Ethmia, 55  
 albiatrigella, Gelechia, 61  
 albocapitella, Laverna, 60  
 allutana, Grapholitha, 68  
 alniella, Lyonetia, 54  
 altissimella, Argyrethia, 67  
 ambrosiaeella, Lithocolletis, 75  
 ambrosiaefoliella, Bucculatrix, 54  
 amorphaeella, Gelechia, 61  
 ampelopsiella, Phyllocnistis, 75  
 ampelopsifoliella, Antispila, 50  
 amphicarpeaeana, Microaethia, 75  
 amphicarpeaeella, Lithocolletis, 74  
 amphicarpeaeefoliella, Leucanthiza, 75  
 amphorana, Semasia, 68  
 ampla, Ploiophora, 56  
 anarsiella, Gelechia, 62  
 angleseana, Enarmonia, 68  
 angustipennella, Pigritia, 56  
 annectella, Holcocera zelleriella, 56  
 annulipes, Holcocera crescentella, 56  
 anticostalis, Botys, 71  
 apachella, Amydria, 50  
 apicalbella, Nepticula, 48, 75  
 apicipunctella, Hyponomeuta, 55  
 apicisignatella, Tinea, 50  
 apicistrigella, Lyonetia, 54  
 apicistrigella, Parasia, 62  
 approximata, Scardia, 50  
 approximella, Peoria, 73  
 argenteomaculatus, Hepiulus, 48  
 argentinotella, Semele, 50  
 argillacea, Depressaria, 55  
 argillaceellus, Crambus, 71  
 argutanus, Episimus, 68  
 argyreella, Pseudopigritia, 57  
 Argyrethiidae, 67  
 argyrosplendella, Calosima, 57  
 arizonella, Amydria, 50  
 arizonella, Pigritia, 57  
 arizoniella, Holcocera, 61  
 arnicella, Depressaria, 55  
 asilipennis, Sesia, 67  
 atrupictella, Eucordylea, 62  
 attributella, Taygete, 55  
 aflugella, Blastobasis, 57  
 aureopurpura, Aegeria, 67  
 aureovireus, Incurvaria, 50  
 auricristatella, Pitys, 50  
 auricyanea, Micropteryx, 48  
 auristrigella, Tinea, 50  
 auropluvella, Tinea, 51  
 aurosuffusella, Tinea, 51  
 austerella, Argyrethia, 67  
 badiella, Tischeria, 49  
 basifasciella, Gelechia, 62  
 basilarella, Pigritia, 57  
 basipallidella, Hococera dives, 57  
 basistrigella, Gelechia, 62  
 bassiformis, Carmenta, 67  
 behrensella, Tinea, 51  
 Belanger, F.H., 47  
 belangerella, Argyrethia, 67  
 Belfrage, G.W., 47  
 bella, Adela, 50  
 bella, Aetole, 67  
 betulella, Acrobasis, 71  
 bicostomaculella, Gelechia, 55  
 bicristatella, Elachista, 60  
 bicristatella, Gelechia, 61  
 bifasciella, Gelechia, 62  
 bifasciella, Homosetia, 53  
 bifida, Euclea, 71  
 bifidella, Nealyda, 62  
 biguttata, Limacodes, 71  
 bimaculella, Depressaria, 62  
 bimaculella, Fascista, 66  
 bimaculella, Gelechia, 75  
 bimaculella, Nothris, 62  
 bimaculella, Tinea, 51, 74  
 biminimaculella, Gelechia, 62  
 bipunctella, Aetia, 61  
 bipunctella, Eucosma, 70  
 bipunctella, Progona, 51  
 biscolorella, Agnippe, 62, 75

- bistrigella, *Phylloporia*, 50  
*Blastobasidae*, 56  
 bobana, *Eucosma*, 68  
 bolanderana, *Paedisca*, 68  
 Boll, J., 47  
 borealis, *Pyrausta*, 71  
 boreasella, *Holcocera*, 57  
 boreasella, *Oecophora*, 55  
 bosqueella, *Oecophora*, 62  
 bosquella, *Nepticula*, 48  
 Boston Society of Natural History, 46  
 brevipennella, *Amydria*, 51  
 brevivittella, *Mompha*, 60  
 busckiella, *Holcocera*, 57  
 busckiella, *Paraplesia*, 51  
 caeculalis, *Perispasta*, 71  
 caemetariella, *Tinea*, 74  
 caeruleana, *Grapholita*, 70  
 caeruleella, *Adela*, 50  
 californicalis, *Eromene*, 71  
 canadensisella, *Bucculatrix*, 54  
 canariella, *Cerostoma*, 66  
 canariella, *Dryope*, 57  
 canopulvella, *Gelechia*, 62  
 canusella, *Harpalyce*, 55  
 capiteabella, *Bucculatrix*, 54  
 carbonella, *Abacobia*, 51  
 cariosella, *Epilegis*, 51  
 carpenterellus, *Crambus*, 72  
 caryaefoliella, *Coleophora*, 75  
 castanaefoliella, *Nepticula*, 45, 48  
 castella, *Euceratia*, 66  
 caudata, *Aegeria*, 67  
 celastrusella, *Zelleria*, 67  
 celtisella, *Lithocolletis*, 75  
 cephalontheiella, *Laverna*, 60, 75  
 cercerisella, *Depressaria*, 62  
 cercerisella, *Fascista*, 64  
 cervinidactylus, *Pterophorus*, 73  
 chalcfrontella, *Holcocera*, 59  
 chalybeis, *Adela*, 50  
 Chambers, V.T., 46  
 chrysocomella, *Isocorypha*, 51  
 chrysurella, *Breckenridgia*, 55  
 ciliaefuscella, *Nepticula*, 48  
 cilialineella, *Gelechia*, 62  
 cincinnatiella, *Lithocolletis*, 75  
 cineraceus, *Oidaematophorus*, 73  
 cinereum, *Palaeophobetron*, 71  
 circumscriptella, *Laverna*, 60  
 citrinipennella, *Tischeria*, 49  
 clemensella, *Gelechia*, 55  
 clemensella, *Lithocolletis*, 75  
 clemensella, *Nepticula*, 48  
 clemensella, *Philonome*, 54, 75  
 clemensella, *Tischeria*, 49  
 clemensella, *Xylesthia*, 51, 74  
*Cochylidae*, 68  
 cockerellana, *Tortrix*, 68  
*Coleophoridae*, 46  
 collusella, *Gelechia*, 62  
 coloradella, *Amydria*, 51  
 coloradella, *Laverna*, 60  
 coloradensis, *Prodoxus*, 50  
 comptoniella, *Acrobasis*, 72  
 concinnusella, *Gelechia*, 62  
 concolor, *Tischeria*, 49  
 concolorella, *Elachista*, 61  
 concolorella, *Eriphia*, 61  
 confectella, *Hypatima*, 57  
 confluentella, *Holcocera*, 57  
 confusella, *Amydria*, 51  
 confusella, *Pigritia*, 57  
 consobrinella, *Nephoteryx*, 72  
 consonella, *Gelechia*, 62  
 constrictana, *Paedisca*, 68  
 constrictella, *Theisoa*, 62  
 continuella, *Chionodes*, 66  
 coryliella, *Hyale*, 55  
 corylisella, *Lithocolletis*, 75  
*Cosmopterigidae*, 61  
*Cossidae*, 68  
 costarufuella, *Gelechia*, 62  
 costotristigella, *Tinea*, 51  
 crassivenella, *Enaemia*, 67  
 crepera, *Cossus*, 68  
 crescentella, *Amydria*, 51  
 crescentella, *Holcocera*, 57  
 crescentifasciella, *Gelechia*, 62  
 cressonella, *Cryptolechia*, 55  
 crispata, *Lagoa*, 71  
 cristatella, *Gelechia*, 62, 75  
 cristatella, *Semele*, 51, 74  
 cristifasciella, *Gelechia*, 62  
 croceoverticella, *Tinea*, 51  
 cruciferella, *Paraneura*, 51  
 cryptolechiella, *Psilocorsis*, 55  
 cucurbitae, *Aegeria*, 67  
 cuprina, *Aglossa*, 72  
 curvilineatella, *Lithocolletis*, 54  
 curvilineiella, *Homostinea*, 51  
 curvistrigella, *Amydria*, 51, 53  
 curvistrigella, *Telphusa*, 62  
 Davis, D.R., 50  
 decemmaculella, *Taygete*, 55  
 decimerella, *Lipographis*, 72  
 definitella, *Laverna*, 60  
 deletella, *Argyresthia*, 67  
 delphinii, *Euclea*, 71  
 dentiferella, *Cerostoma*, 67  
 denudatum, *Trochilium*, 67  
 depressostrigella, *Gelechia*, 62  
 desertana, *Paedisca*, 68  
 determinatella, *Oecophora*, 61  
 dianella, *Calosima*, 57  
 Dietz, W.G., 47  
 dietziana, *Epinotia*, 68  
 dietziella, *Incurvaria*, 50  
 difficilisella, *Evagora*, 55  
 dimidiata, *Rhodoneura*, 73  
 directana, *Sparganothis*, 70  
 disconotella, *Gelechia*, 62

- discoocellella, *Chionodes*, 66  
 discoocellella, *Gelechia*, 62  
 discopunctella, *Dryope*, 57  
 discostrigella, *Anesychia*, 55  
 dives, *Holcocera*, 57  
 dodana, *Eucosma*, 68  
 dodecana, *Paedisca*, 68  
 dorsivittella, *Gelechia*, 62  
 dorsomaculella, *Pseudopigritia*, 57  
 dubitella, *Depressaria*, 62  
 duodecemlineella, *Gracilaria*, 75  
 dyarella, *Amydria*, 51  
 dyarella, *Amydria*, 52  
 eburnea, *Scythris*, 61  
 eclipsana, *Grapholitha*, 68  
 edmandsii, *Nephopteryx*, 72  
 ednana, *Phalonia*, 68  
 Edwards, H., 47  
 effrentella, *Amydria*, 51  
 ehrhornella, *Paraneura*, 51  
 Elachistidae, 56  
 electella, *Anerastia*, 72  
 elegantella, *Gelechia*, 62  
 elyella, *Holcocera*, 57  
 emancipatum, *Gnorimoschema*, 63  
 ephippiatus, *Limacodes*, 71  
 equitella, *Pseudopigritia*, 57  
 Eriocraniidae, 48  
 erransella, *Perimede*, 61, 75  
 estriatella, *Holcocera*, 57  
 eunitariaeella, *Tinea*, 52  
 eupatoriella, *Ypsolophus*, 62  
 eupatoriella, *Depressaria*, 55, 75  
 exasperatana, *Tortrix*, 69  
 exoptatella, *Glyphipteryx*, 66  
 fagigemmaeana, *Exartema*, 69  
 faginella, *Hagno*, 55  
 falciferella, *Cerostoma*, 67  
 falsarius, *Acoloithus*, 71  
 fasciella, *Gracilaria*, 75  
 fasciella, *Pitya*, 52  
 fenestrella, *Pempelia*, 71  
 fenyessella, *Dryope*, 57  
 feriella, *Tacoma*, 72  
 Fernald, C.H., 47  
 fernaldella, *Depressaria*, 55  
 fernaldella, *Setiostoma*, 55  
 ferruginea, *Euclea*, 71  
 feudalis, *Botis*, 72  
 fidella, *Ploiophora*, 57  
 floridella, *Progona*, 52  
 floridella, *Valentinia*, 58  
 fluxella, *Blastobasis*, 58  
 fractiliniella, *Apotomia*, 52  
 fragariana, *Lozotaenia*, 69  
 fragmentella, *Gelechia*, 63  
 fraternella, *Pseudopigritia*, 58  
 Frey, H., 47  
 frigidana, *Penthina*, 69  
 frigidella, *Eudorea*, 72  
 frigidella, *Oecophora*, 52  
 frustella, *Cerostoma*, 67  
 frustrana, *Retinia*, 69  
 fullonella, *Anacamptis*, 65  
 fulminalis, *Melissoblaptes*, 72  
 fulminalis, *Paralipsa*, 48  
 fulvifrontana, *Penthina*, 69  
 fulvipes, *Aegeria*, 67  
 fulvisuffusella, *Tinea*, 52  
 fumerella, *Holcocera chalcifrontella*, 58  
 funebra, *Holcocera*, 58  
 fusca, *Pyla*, 72  
 fuscella, *Niditinea*, 52  
 fuscocostella, *Lithocolletis*, 75  
 fuscocristatella, *Naera*, 63  
 fuscocristatella, *Pitya*, 52  
 fuscofasciella, *Euplocamus*, 52  
 fuscoluteella, *Depressaria*, 63  
 fuscomaculella, *Gelechia*, 63  
 fuscomaculella, *Tinea*, 52  
 fuscomarginella, *Tischeria*, 49  
 fuscoochrella, *Gelechia*, 63, 75  
 fuscopalidella, *Sinoe*, 63  
 fuscopulvella, *Agnippe*, 63  
 fuscopulvella, *Gelechia*, 63  
 fuscopurplella, *Blastobasis plummerella*, 58  
 fuscoscapulella, *Acanthoconemes*, 54  
 fuscostrigella, *Plyhymno*, 63  
 fuscossuffusella, *Dryope*, 58  
 fuscotaeniaeella, *Gelechia*, 63  
 fuscotibiella, *Stigmella*, 48  
 Gelechiidae, 61  
 geminata, *Cyrtosia*, 71  
 geniculatella, *Tinea*, 52  
 georgiella, *Dichomeris*, 62  
 gigantella, *Blastobasis*, 58  
 gilviscopella, *Gelechia*, 63  
 glacialis, *Botys*, 72  
 glandiferella, *Gelechia*, 63  
 glandulella, *Valentinia*, 59  
 glaucofusca, *Conchylis*, 69  
 gleditschiaella, *Laverna*, 61, 75  
 glycyrhizaeella, *gelechia*, 63  
 Glyphipterigidae, 66  
 gomonana, *Eucosma*, 69  
 gracilis, *Heliozela*, 50  
 gracilis, *Koreschehellus*, 48  
 Gracillariidae, 46  
 grandis, *Lioptilus*, 73  
 grandis, *Oidaematophorus*, 48  
 grandisella, *Nepticula*, 49  
 granella, *Nemapogon*, 51, 52, 53  
 griseella, *Tinea*, 52  
 grisella, *Dryope*, 58  
 grisseella, *Laverna*, 60  
 hagenella, *Anesychia*, 55  
 haimbachiana, *Epinotia*, 69  
 hamellus, *Crambus*, 72  
 Harris, T.W., 47  
 heidemannella, *Epigritia*, 58  
 Heliodinidae, 67  
 heliopsisella, *Tischeria*, 49, 75

- Heliozelidae*, 50  
*henshawiella*, *Scrobipalpula*, 64  
*Hepialidae*, 48  
*hospitelletta*, *Ephestida*, 72  
 Hulst, C.D., 47  
*hulstella*, *Blastobasis*, 58  
*humilis*, *Antaeotricha*, 55, 56  
*hybromella*, *Oenoe*, 52  
*iceryaeella*, *Blastobasis*, 58  
*ignobilisella*, *Laverna*, 60  
*illibella*, *Holcocera*, 58  
*imamoenella*, *Setomorpha*, 52  
*immaculata*, *Lagoa*, 71  
*immaculatella*, *Butalis*, 61  
*impigritella*, *Diploschizia*, 66  
*impositella*, *Scythris*, 61  
*inclusa*, *Holcocera*, 58  
*Incurvariidae*, 50  
*inimicella*, *Galleria*, 69  
*innocella*, *Gelechia*, 63  
*inornatella*, *Eulyoneta*, 54  
*inquinatalis*, *Udea*, 72  
*insulatella*, *Holcocera*, 58  
*integra*, *Scoptonoma*, 72  
*internediella*, *Gelechia*, 63  
*intermistana*, *Olethreutes*, 70  
*interpunctella*, *Holcocera*, 58  
*interrupta*, *Scoptonoma*, 72  
*interstitiella*, *Tinea*, 52  
*inversella*, *Epicorthis*, 63  
*irreella*, *Monopis*, 52  
*juglandifoliella*, *Nepticula*, 49  
*juncidella*, *Dichomeris*, 62  
 Kearfott, W.D., 47  
*labradoriensis*, *Hepialus*, 48  
*lacteodactylus*, *Pterophorus*, 73  
*laticapitella*, *Pigritia*, 57, 58  
*latifasciatella*, *Nephopteryx*, 72  
*latifasciella*, *Gelechia*, 63  
*latifasciella*, *Nepticula*, 49  
*latipenella*, *Tischeria*, 49  
*lavernella*, *Gelechia*, 63  
*laycei*, *Megalopyge*, 71  
*lentiflualis*, *Homophysa*, 72  
*leoninella*, *Pempelia*, 72  
*leuconota*, *Evippe*, 65  
*leuconota*, *Gelechia*, 63  
*leucophaleratana*, *Pandemis*, 69  
*ligulella*, *Dichomeris*, 65  
*Limacodidae*, 71  
*lithosina*, *Cryptolechia*, 55  
*litigiosella*, *Bucculatrix*, 54  
*liturosella*, *Gelechia*, 63  
*livorella*, *Blastobasis*, 58  
*longalis*, *Dysodia*, 73  
*longifasciella*, *Telphusa*, 62, 64  
*longimaculella*, *Hyponomeuta*, 55, 75  
*longipalpiana*, *Syllonoma*, 69  
*luteella*, *Bucculatrix*, 54, 75  
*luteella*, *Eurynome*, 54  
*luteopulvella*, *Dryope*, 58  
*luteostrigella*, *Polyhymno*, 63  
*Lyonetiidae*, 54  
*maculata*, *Thyris*, 73  
*maculatella*, *Homosetia*, 52  
*maculimarginella*, *Gelechia*, 63  
*maculipes*, *Zenodoxus*, 67  
*maculosella*, *Nepticula*, 49  
*magnatella*, *Laverna*, 74  
*magnella*, *Bucculatrix*, 54  
*majorella*, *Setomorpha*, 52  
*mandarinella*, *Tinea*, 51  
*marcidana*, *Phoxopterus*, 69  
*marginatum*, *Trochilium*, 67  
*marginimaculella*, *Homosetia*, 52  
*marginistrigella*, *Tinea*, 52  
*margoriella*, *Amydria*, 52  
*marmorella*, *Gelechia*, 63  
*maximella*, *Nepticula*, 49  
*mediofasciella*, *Pigritia*, 58  
*mediofuscella*, *Chionodes*, 63  
*mediostriatella*, *Isocorypha*, 50  
*Megalopygidae*, 71  
*melanocarpum*, *Helcystogramma*, 66  
*melanogrammos*, *Tetralopha*, 72  
*melanostriatella*, *Holcocera*, 58  
*merrickanum*, *Exartema*, 69  
*mesogramma*, *Ochrothyris*, 73  
*messelinella*, *Holcocera*, 58, 60  
*metallicana*, *Olethreutes*, 69  
*metalliferalis*, *Calaclysta*, 72  
*minimaculella*, *Gelechia*, 63  
*minimella*, *Gelechia*, 63  
*minnicella*, *Dryope*, 59  
*minorella*, *Holcocera chalcifrontella*, 59  
*minuta*, *Acleris*, 70  
*minutipulvella*, *Tinea*, 52  
*miriameella*, *Leucomele*, 52  
*mirusella*, *Anesychia*, 55  
*miscana*, *Eucosina*, 69  
*miscicolorella*, *Laverna*, 61  
*miscericristatella*, *Pitys*, 52  
*miscella*, *Tinea*, 52  
*molybdanella*, *Tinea*, 52  
*Momphidae*, 60  
*monitor*, *Euclea*, 71  
*monodactyla*, *Emmelina*, 74  
*montella*, *Argyresthia*, 67  
*montisella*, *Cosmopteryx*, 61  
*montisella*, *Glyphipteryx*, 66  
*monumentella*, *Gelechia*, 63  
*multifasciella*, *Theisoa*, 64  
*multimaculella*, *Gelechia*, 52  
*multipunctella*, *Anesychia*, 56  
*multistriatella*, *Tinea*, 53  
*murina*, *Penthina*, 69  
 Murtfeldt, M., 47  
*murtfeldtella*, *Dryope*, 59, 75  
*murtfeldtella*, *Laverna*, 60  
*mustelinialis*, *Botys*, 72  
*nebeculosa*, *Cryptolechia*, 56  
*nebraskae*, *Euhagena*, 68



- nebulosana, Grapholitha, 69  
 nepotella, Epichaeta, 53  
 Nepticulidae, 48  
 nigratomella, Battaristis, 62  
 nigrella, Gelechia, 64  
 nigrilineella, Eriphia, 61  
 nigriverticella, Stigmella, 49  
 nigroatomella, Tinea, 53  
 niveosana, Sciaphila, 69  
 nonstrigella, Dasycera, 64  
 novi-mundi, Depressaria, 56  
 nubiferella, Depressaria, 56  
 nubilella, Blastobasis, 59  
 numerosana, Paedisca, 69  
 obliquella, Amydria, 53  
 obliquifasciella, Gelechia, 64  
 obliquistrigella, Anarsia, 64  
 obrutella, Ectoedemia, 48  
 obscurella, Homosetia, 53  
 obscurella, Pigritia, 59  
 obscurefasciella, Bucculatrix, 54  
 obscuremaculella, Cryptolechia, 56  
 obscurosfusella, Filatima, 62  
 obscurosfusella, Gelechia, 64  
 obscurusella, Chionodes, 63  
 obscurusella, Depressaria, 64  
 obscurusella, Laverna, 60  
 occidentalis, Scopula, 72  
 occidentella, Amydria onagella, 53  
 occidentella, Dryope, 59  
 occidentella, Gelechia, 64  
 occidentella, Tinea, 53, 54  
 ocellella, Gelechia, 64  
 ochrella, Coleophora, 75  
 ochrella, Plutellidae, 67  
 ochreocostella, Gelechia, 64  
 ochreostrigella, Gelechia, 64  
 ochreosuffusella, Filatima, 62  
 ochrifrontella, Ephesia, 72  
 ochrocephala, Holcocera, 59  
 ochromediana, Oletreutes, 69  
 ochromella, Epigritia, 59  
 octonalis, Orobona, 72  
 Oecophoridae, 55  
 oenotheraesemenella, Laverna, 60  
 oenotheriella, Laverna, 74  
 olivaceana, Eccopsis, 69  
 olympiadella, Gelechia, 64  
 onagella, Amydria, 53  
 operosella, Setomorpha, 53  
 ophionalis, Microtheoris, 73  
 ophrionella, Tinea, 53  
 orichalcella, Periploca, 61  
 orleansella, Tinea, 53  
 ornatella, Lithocolletis, 75  
 ornatella, Pigritia, 59  
 ornatifimbriella, Filatima, 61, 66  
 osmundana, Oletreutes, 69  
 osmundana, Penthina, 69  
 ostryaella, Acaea, 61  
 ovalis, Pempelia, 72  
 ovalis, Telethusia, 72  
 Packard, A.S., Jr., 47  
 packardella, Bucculatrix, 54  
 packardella, Gracilaria, 75  
 packardi, Grapholitha, 69  
 paleaceus, Leioptilus, 73  
 pallidactyla, Platyptilia, 73  
 pallidastrigella, Cleodora, 64  
 pallidella, Cleodora, 64  
 pallidochrella, Depressaria, 64  
 pallidochrella, Helice, 64, 75  
 pallidotinctella, Epigritia, 59  
 palpiannulella, Gelechia, 64  
 palpilineella, Gelechia, 64  
 pandurella, Amydria, 53  
 paradoxella, Apreta, 53  
 paradoxica, Hyponomeuta, 50  
 parvipulvella, Elachista, 56, 75  
 Peabody Academy, 46  
 peculiana, Teras, 69  
 pedmontella, Argyresthia, 67  
 pedmontella, Gelechia, 64  
 pennsylvanica, Pseudochelaria, 64  
 perfluana, Grapholitha, 70  
 pergracilidactylus, Pterophorus, 74  
 perrubralis, Botys, 73  
 persicana, Clepsis, 69  
 physaliella, Gelechia, 64  
 pinatubana, Eulia, 70  
 piperatella, Cryptolechia, 56  
 piperatella, Durrantia, 55  
 plagiata, Holcocera, 59  
 platanana, Ancyliis, 69  
 platanella, Cirrha, 64  
 platanella, Ectoedemia, 49  
 plausipennella, Butalis, 61  
 plumbicostalis, Botys, 73  
 plumbolineana, Epinotia, 70  
 plummerella, Blastobasis, 58, 59  
 plutella, Gelechia, 64  
 plutella, Neda, 65  
 plutella, Phaetusa, 65  
 Plutellidae, 66  
 polistiformis, Aegeria, 68  
 polita, Calantica, 67  
 pomifoliella, Bucculatrix, 54  
 pomivorella, Micropteryx, 49  
 popeanella, Acrolophus, 53  
 posticella, Depressaria, 56  
 praeangusta, Batrachedra, 74  
 primulana, Paedisca, 70  
 profundalis, Botys, 73  
 prosperana, Enarmonia, 70  
 prudens, Trypanisma, 65  
 prunifoliella, Evippe, 65  
 prunifoliella, Stigmella, 49  
 pruniramiella, Xylesthia, 51  
 prunivorella, Ornix, 75  
 pseudacaciella, Depressaria, 65  
 Pterophoridae, 73  
 ptychogrammos, Teras hastiana, 70

- pudibundella, Aristotelia, 65  
 pulchella, Euresia, 59  
 pulla, Trosia, 71  
 pullusella, Aristotelia, 63  
 pulvella, Tischeria, 49  
 punilio, Marasmarchia, 48  
 pumilio, Mimesoptilus, 74  
 punctidiscella, Dichomeris, 66  
 punctiferella, Holcocera, 60  
 pupula, Lactura, 67  
 purinosella, Tischeria, 49  
 purpurella, Pigritia, 59  
 purpuriella, Chrysopeleia, 61  
 purpuriella, Chrysopelia, 75  
 purpuriella, Gracilaria, 75  
 pusilla, Holcocera, 59  
 Pyralidae, 71  
 pyri, Aegeria, 68  
 quadricustatella, Aeaëa, 61  
 quadrilineella, Cosmopterix, 61  
 quadrimaculella, Anacamptis, 48  
 quadrimaculella, Gelechia, 65  
 quadristrigella, Argyresthia, 67  
 quaintancellæ, Valentinia, 59  
 quercicolella, Argyresthia, 67  
 querciella, Depressaria, 65  
 querciella, Gelechia, 75  
 querciella, Ypsolophus, 65  
 quercifoliola, Argyrotaenia, 70  
 quercinigracella, Gelechia, 65  
 quercinigracella, Pseudotelphusa, 63  
 quercipominella, Ypsolophus, 65  
 quercipulchella, Nepticula, 49  
 quercitella, Tischeria, 50  
 quercivorella, Coleotechnites, 63  
 quercivorella, Gelechia, 65  
 quercivorella, Tischeria, 49, 75  
 quericastanella, Nepticula, 49  
 quinqueannulella, Gelechia, 65  
 quinqueferella, Glyphipteryx, 56  
 quinquepunctellus, Prodoxus, 50  
 quintana, Paedisca, 70  
 quisquiliella, Blastobasis, 59  
 raracana, Thiodia, 70  
 reductella, Holcocera funebris, 59  
 reedella, Ypsolophus, 65  
 reniculalis, Homophysa, 73  
 resplendensella, Nepticula, 49  
 rheumapterella, Incurvaria, 50  
 rhoifruetella, Anacamptis, 62, 64, 65  
 ribesella, Gelechia, 65  
 rileyella, Depressaria, 65  
 rileyi, Tinea, 53  
 robiniaë, Prionoxystus, 68  
 robinella, Sinœ, 63  
 robinsonana, Eucosma, 70  
 roburella, Tinea, 53  
 roseatella, Nephopteryx, 73  
 roseticola, Tischeria, 50  
 rubensella, Gelechia, 65, 75  
 rubidella, Aristotelia, 65  
 rubrifasciella, Acrobasis, 73  
 ruderella, Setomorpha, 53  
 rufopunctella, Holcocera, 59  
 rufusella, Gelechia, 65  
 rutella, Setomorpha, 51, 52, 53, 54,  
 saginella, Stigmella, 49  
 sagitella, Blastobasis, 59  
 salicifoliella, Gracilaria, 74  
 salicifoliella, Lithocolletis, 74  
 sanborni, Harrisina, 71  
 saphirinella, Gelechia, 65  
 Saunders, W., 47  
 saundersella, Gelechia, 65  
 scardina, Anaphora, 53  
 sciaphilella, Blastobasis, 59  
 sciaphilella, Holcocera, 60  
 scintillana, Pelochrista, 68  
 scitula, Aegeria, 68  
 scobiella, Stylopalpia, 72  
 scutellariaeella, Gelechia, 65  
 Scythrididae, 61  
 securella, Euceratia, 67  
 sella, Gelechia, 65  
 semicostatus, Mimeseoptilus, 74  
 semilugens, Ethmia, 56  
 semirubralis, Botys, 73  
 septemstrigella, Tinea, 53  
 septentrionana, Olethreutes, 69  
 sepulchrella, Trypodema, 53  
 seriatana, Conchylis, 70  
 serotinaeella, Nepticula, 49  
 serratipalpella, Gelechia, 65  
 serratissimalis, Crocidophora, 73  
 serrativittella, Dichomeris, 64  
 serrativittella, Gelechia, 65  
 servulella, Hybroma, 51  
 sescuplana, Tortrix, 70  
 Sesiidae, 67  
 sesquialteralis, Botis, 73  
 setosella, Dichomeris, 62  
 sexnotella, Gelechia, 61  
 sexstrigella, Polyhymno, 66, 75  
 shaleriella, Oecophora, 56  
 sigmoidella, Setomorpha, 53  
 similiella, Isophriëtis, 66  
 simplicella, Blastobasis plummerella, 59  
 simulella, Holcocera, 59  
 simulella, Paraneura, 53  
 sincera, Oecotoperia, 73  
 skinnerella, Mea, 52, 53  
 skinnerella, Progona, 53  
 solaniella, Gelechia, 66  
 spaldingana, Eucosma, 70  
 speculella, Lyonetia, 54  
 spiculana, Grapholitha, 70  
 spoliatella, Holcocera messelinella, 60  
 spoliatella, Pigritia, 60  
 spretella, Holcocera, 60  
 staintonella, Bucculatrix, 55  
 staintonella, Elachista, 56  
 stimulea, Acharia, 71

- straminiella, *Tinea*, 53  
 straminiella, *Ypsolophus*, 66  
 subdivisalis, *Desmia*, 73  
 subfasciella, *Araeolepia*, 67  
 subnivana, *Acleris*, 69  
 subolivalis, *Botys*, 73  
 subsenella, *Hypatima punctiferella*, 60  
 subsequalis, *Pyrausta*, 71  
 sulphureodactylus, *Pterophorus*, 74  
 syringae, *Aegeria*, 68  
 tabaniformis, *Paranthrene*, 68  
 tartarella, *Holcocera*, 60  
 tautana, *Sereda*, 70  
 tenebrella, *Dryope*, 60  
 ternariella, *Gelechia*, 66  
 terracoctana, *Paedisca*, 70  
 tessellana, *Penthina*, 70  
 tessellatella, *Lindera*, 51, 53  
 testacea, *Tortricidia*, 71  
 testulana, *Cenopsis*, 70  
 tetradella, *Anerastia*, 73  
 texanella, *Anaphora*, 53  
 texanella, *Anesychia*, 66  
 texanella, *Elachista*, 48  
 texanella, *Hyponomeuta*, 56  
 theseusalis, *Herpetogramma*, 72  
 thoracealbella, *Aroga*, 63  
 thoracealbella, *Gelechia*, 66  
 thoracealbella, *Nepticula*, 49  
 thoracefasciella, *Gelechia*, 56  
 thoracenigraella, *Gelechia*, 56  
 thoracestrigella, *Tinea*, 53  
 thuiella, *Bucculatrix*, 67  
 Thyrididae, 73  
 tibiale, *Trochilium*, 68  
 tiliaeella, *Lithocolletis*, 75  
 tinctoriella, *Tischeria*, 50  
 tineana, *Ancylis*, 69  
 Tineidae, 50  
 Tischeriidae, 49  
 torticiformella, *Menesta*, 55  
 tortricella, *Harpalyce*, 56  
 Tortricidae, 68  
 transversestrigella, *Semiota*, 53  
 trialbamaculella, *Gelechia*, 66  
 triangularisella, *Holcocera*, 60  
 tricineta, *Aegeria*, 68  
 tricristatella, *Leucophryne*, 60  
 trifasciella, *Bucculatrix*, 54  
 trifasciella, *Gelechia*, 66  
 trifurcella, *Anesychia*, 56  
 trifurculana, *Tortrix*, 70  
 trilineella, *Gelechia*, 66  
 trimaculella, *Anarsia*, 66  
 trimaculella, *Gelechia*, 66  
 trimaculella, *Isophrietis*, 48  
 triocellecta, *Gelechia*, 66  
 tripartitana, *Paedisca*, 70  
 tristella, *Pigritia*, 60  
 tristriata, *Sparganothis*, 70  
 tritaeniaella, *Lithocolletis*, 75  
 tuscanella, *Tinea*, 54  
 ulmella, *Lithocolletis*, 75  
 umbraticostella, *Depressaria*, 56  
 unctulella, *Gelechia*, 66  
 undulatella, *Argyresthia*, 67, 75  
 unifascialis, *Botys*, 73  
 unifascialis, *Pyrausta*, 48, 73  
 unifasciella, *Laverna*, 60  
 unifasciella, *Nepticula*, 49  
 unimaculella, *Ithome*, 61  
 unipunctella, *Antaeotricha*, 55, 56  
 unistriatellus, *Crambus*, 73  
 unomaculella, *Perimede*, 75  
 unomaculella, *Tinea*, 54  
 ustella, *Ypsolopha*, 67  
 vagatioella, *Coleotechnites*, 62  
 vanella, *Plutella*, 67  
 variatella, *Nemapogon*, 50, 52  
 variella, *Gelechia*, 66, 75  
 variolana, *Teras*, 70  
 ventrella, *Dichomeris*, 65  
 versutella, *Gelechia*, 66  
 vertumnana, *Paedisca*, 70  
 verutana, *Bactra lanceolana*, 70  
 vestaliana, *Grapholitha*, 70  
 vestaliella, *Holcocera*, 60  
 vestalis, *Cryptolechia*, 56  
 vibicalis, *Botis*, 73  
 vicinella, *Tinea*, 54  
 violaceofusca, *Gelechia*, 66  
 virescana, *Clepsis*, 70  
 visaliella, *Cyane*, 54  
 viteana, *Endopiza*, 70  
 viticordifoliella, *Antispila*, 50  
 vitifoliella, *Phyllocnistis*, 75  
 vitivorana, *Penthina*, 70  
 Walsingham, Lord, 47  
 walsinghami, *Pseudochelaria*, 66  
 worthingtoniana, *Paedisca*, 70  
 xanthobasis, *Setiostoma*, 56  
 xanthostictella, *Tinea*, 54  
 Yponomeutidae, 67  
 yuccaeolella, *Blastobasis*, 60  
 yuccasella, *Tegeticula*, 50  
 yumaella, *Plutella*, 54  
 y-inversa, *Limacodes*, 71  
 zana, *Enarmonia*, 70  
 Zeller, P.C., 47  
 zelleriella, *Holcocera*, 60  
 zelleriella, *Hyponomeuta*, 56  
 zelleriella, *Tischeria*, 49  
 zophodactyla, *Stenoptilia*, 74  
 Zygaenidae, 71